



92
5856
656
Ent

With respects of the Author *Townend Glover*

*Prof^r Spencer F Baird Smithsonian Institution
Washington D.C.*

Manuscript Notes from my Journal,

OR

ENTOMOLOGICAL INDEX,

TO NAMES, &c.,

IN

AGRICULTURAL REPORTS.

WITH LIST OF

VEGETABLE AND ANIMAL SUBSTANCES INJURED OR
DESTROYED BY INSECTS, &c.

CONTENTS.

Alphabetical index to Agricultural Reports.	Page	1
List of Vegetable and Animal Substances	"	80
Errata and Addenda	"	102

WASHINGTON:

Written by *Townend Glover*. Transferred to and Printed from Stone by *J. C. Entwistle*.

1877.

g 2
85856
G56
Ent

Glover, Townsend

Manuscript Notes from my Journal,

OR

ENTOMOLOGICAL INDEX,

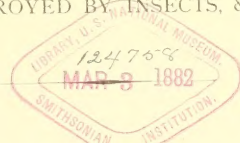
TO NAMES, &c.,

IN

AGRICULTURAL REPORTS,

WITH LIST OF

VEGETABLE AND ANIMAL SUBSTANCES INJURED OR
DESTROYED BY INSECTS, &c.



CONTENTS.

Alphabetical index to Agricultural Reports.	Page	i
List of Vegetable and Animal Substances	"	So
Errata and Addenda	"	102

WASHINGTON :

Written by Townsend Glover. Transferred to and Printed from Stone by J. C. Entwistle.

1877.

*Entered according to Act of Congress in the year 1877, by Townsend Glover,
In the office of the Librarian of Congress at Washington.*

Entomological Index to the Agricultural Reports.

This index refers principally to the insects mentioned in the Agricultural reports from 1854 to the present time. The report for 1875, having been written, but not yet published, the number of the page is necessarily omitted. — This work has been prepared out of office hours, for my own use, and for Agricultural Societies having a complete set of the Annual reports of the Department of Agriculture, as a means by which they may be able to identify insects, not only under their old names, but also under the new names recently given to many of them by scientists. The common English names are also given when necessary. The scientific name given at the end of a paragraph with the letters SS. and a number attached to it, signifies that it is the latest name given by Scientists, and that a colored plate of it may be found at plate V, figure 30 and so. on my plates of insects figured for the use of the Department, in the Entomological cabinet of the Museum of the Department of Agriculture in Washington. The following Abbreviations have also been used.

Col. Coleoptera ~ Cr. Crotch. ~ Dip. Diptera ~ Eu. Europe ~ Fig. Figure ~ Hct. Heteroptera
Hom. Homoptera ~ In. Ins. Insect. ~ Italics a line, under a name ~ signifies that it is merely a synonym. L. or Lar Larva ~ Lec. Leconte ~ Lep. Lepidoptera. m. more mention. ~ New Newoptera. ~ Orth. Orthoptera ~ p. page ~ Pl. plate ~ Pop. pupa ~ S. Am South America ~ Syn. Synonym ~ Dep. Ag. Department of Agriculture, reports. D. J. B. D. J. Brown a former chief clerk who misnamed the insects in Reports for 1855 &c. When double lines == are placed under the letters SS. and name or numbers at the end of a paragraph it signifies that the insect may be found under such a name and numbers in the colored plates in the Entomological Cabinet. Ag. Rep. Agricultural Report — K. misplaced in Unpublished List.

Abraça (Eulophia) nileana (Hct.) Currant moth. Spannus no protection. Checkers better. see Ag. Rep. 1869 p. 415. Eulophia SS. (Lep.) Lar. CXXII/14, Ins. LIII/5, LXX/24.
Acanthis (Amex) tecumana (Hct.) Red Bug. I. K. I. suck the blood of mankind and various animals and birds, as Bats, Fowls, pigeons, Swallows &c. and are said to be destroyed by cockroaches (Blattidae) (Orth.) & by other insects. Radarius personatus, Porales ligusticatus, Conorhinus (Sanguisuga) variegatus, and other Heteroptera Ag. Rep. 1864 p. 558. remedies, 1875, p. 127, fig. 38. ~ Acanthis SS. III/9 (Hct.)
Acanth. canina (Hct.)? (fnol. Thomasi?) is the "brownish black Anisocelis of D. J. B. see Ag. Rep. 1855, p. 95, pl. VII, fig. 9. (Hct.) SS. IV/113, VII/22 (Hct.)
Acanthcephala, Metaphodius decoloris (Hct.) see Ag. Rep. 1875, fig. 14 p. 120. SS. VII/26 (Hct.)
Acanthcephala, femorata (Hct.) (Synonyms Metaphodius Anisocelis & Rhinuchus nasutus) injures fruit of Cherry, Ag. Rep. 1875, fig. 13 p. 119. It is also found on Cotton. SS. I/20 (Hct.)
Acanthosoma, grisea, (Europe) (Hct.) sucks sap of Birch. habits &c. Ag. Rep. 1875 p. 117, no fig.
" lateralis (US) Hct. is the representative of A. canina of Europe Ag. Rep. 1875 p. 118.
" nebulosa (Hct.) sucks the sap of trees, plants &c. Ag. Rep. 1875, p. 116, fig. 6. SS. IX/7 (Hct.)
Acanus? see Itch insect, remedy Ag. Rep. 1864 p. 564. — Acanus scabies Itch insect Ag. Rep. 1861 p. 426.
" telonius, Red spider, injures Lecanice (Saunders) Ag. Rep. 1871 p. 109.
" " " " injures foliage of cotton. Ag. Rep. 1855/79, fig. 7. & 1862 p. 388.
" " ? a red mite infesting grasshoppers. (Acridium Orth.) Rathbone in Ag. Rep. 1862 p. 388. (see also Automa)
" " " " saccharis, or Sugar mite. Ag. Rep. 1871, p. 426. infests Sugar.
Acanus of Sheep scab. Nat. History. Habits. Symptoms, remedies &c. with good figures. infests sheep horses, dogs, cats & oxen. Ag. Rep. 1869 p. 386.
Acclimation, and domestication, of animals, by Dr Craig, Ag. Rep. 1859 p. 207. see also Animals.

Acclimation. Garden of in Paris. Animals. vi. see Agt Rept 1865 p 95.

Acheta, abbreviata (Orth.) Black field cricket. hides under stones & timber. &c. Rathvon. Agt Rept 1862 p 380 fig 15. SS. Gryllus abbreviatus VII/11 (Orth.)

Acheta domestica (Orth.) House cricket. habits remedii &c. Agt Rept 1874 p 142 fig 15.

Gryllus domesticus. SS. VI/14 (Orth.)

Acheta vittata (Orth.) Striped cricket. feeds on vegetables. Carrion. &c. Rathvon. Agt Rept. 1862 p 381.

Nemobius vittatus SS III/9. 10 (Orth.)

Acrolothus (Procris) americanus. (Lep.) I destroy foliage of Grape vines. Agt Rept. 1874 p. 78. fig 6. remedy. 1864. 549. & 1870 p 81. Acrolothus. SS. XVII/3. Sep.

Acrolothus (Procris) falcarius. (Lep.) I feed on foliage of grape vine & Virginia creeper. Agt Rept. 1870 p 81, fig 42. Acrolothus. SS. LXVII/27. (Lep.)

Acronycta ? (Lep.) Larva destroyed by parasitic *Schneumon* flies. great numbers being in one larva. Agt Rept. 1866 p 43.

Aceroides (Orth.) I. P. S. feed upon Grass & herbage. Agt Rept 1874 p 135. { *Aceroides* Agt Rept 1869. 308 m.m.

Aceroides (Aceroides) Orth. Spine breasted Locusts. distinguished by having a spine projecting from below on the middle of the breast. Rathvon Agt Rept 1862 p 384. & 1866 p 28.

Aceroides (Cyrtacanthopis) americanum. (Orth.) Rathvon Agt Rept 1862 p 385 fig 25. SS. I/15 (Orth.)

Aceroides austacum (Orth.) Rathvon Agt Rept. 1862 p 384 fig 24. SS. X/19 (Orth.)

Aceroides (Caloptenus) femur rubrum (Orth.) Rathvon. Agt Rept. 1862 p 384 fig 23. I P S destroy almost all kinds of vegetation & when very hungry eat even the wood of fence rails. &c.

Caloptenus femur rubrum SS. V/7. & VIII/2. (Orth.)

Aceroides (Caloptenus) femoratus (Orth.) Rathvon. Agt Rept. 1862 p 384.

Caloptenus viridatus SS. VI/6 & I/16 (Orth.)

Aceroides peregrinum. Migratory Locust (Orth.) of Arabia Egypt Persia Senegal & Syria Agt Rept 1874 p. 135 fig 7a. SS. XIV/4 (Orth.)

Aceroides (Aceroides) peregrinum (Orth.) Migratory Locust of Algeria France. Germany. Hungary. Italy Spain &c. Agt Rept 1874 p 134. SS. XIV/9 (Orth.)

Aceroides. see *Aceroides*.

x *Algeria*. see also *Trochilium*

Adelops nuda. (Col.) found on bones in the mammoth cave in Kentucky. Mo., Agt Rept 1868 p 116. fig 20. SS. XXXI/21. (Col.)

Algeria (Trochilium) exilis (Lep.) Peach tree borer. Larvae bore into & destroy roots & wood of the peach, nectarine Apricot, plum, Cherry, &c. Agt Rept 1874 p 63 pl. 7. Nat. Hist. habits. & remedies. 1857 p 122. m.m. 1858 p 360. remedy boiling water. berries of cherry tree &c. 1864 p. 550. remedies. &c. 1866 p 29. m.m. 1870 p 87. remedy hot water. 1872 p 114. a fly (Myrmecodia) in narrow made by Algeria. Algeria. SS. I P S. XLVIII/2. (Lep.)

Algeria (Trochilium) prostratiformis (Lep.) Grape vine root borer. Larvae injure the roots, & lower part of the stems & grape vines. Agt Rept 1874 p 50. pl 6. Dr. Hoon. habits. &c. 1867 p 72. figured. Snapping grape said to be exempt. 1870 p 72. more mention.

Algeria. SS. XVIII/5. (Lep.)

Algeria (Trochilium) strabus (Lep.) Currant borer. I bores in the stems of Currants, habits, remedies &c. Agt Rept 1864 p 551. L P S. p. XL/3. SS. (Lep.)

Agarantus, suturatus (Europe) (Col.) found on the great stems of Lucerne. Agt Rept 1865 p 89.

Agrostis, vanillae (Lep.) Caterpillar found in Cotton fields but does no injury as the caterpillar feeds on Passon vine or Maypop. Agt Rept 1855 p 106 pl 13 fig 10. destroyed by Ich. - neumon flies Agt Rept 1866 p 43. SS. Jan 1/8 In. XXXIV/3. Sep.

Agrilus (Col.) European sp. I destroy Beech. Oak. Yew. Agt Rept 1868 p 92. 111. fig 103. 1870 p 67.

Agrilus egenus. (Col.) Ins. eats holes in foliage of Locust Agt Rept 1868 p 92. 111. fig 103. 1870 p 67. SS. XXIII/7. (Col.)

Agrilus, ruficornis (Col.) Larva bores into the pith of stems of Raspberry. Agt Rept. 1868 p 92 fig 101. { 1870 p 67. fig 7. SS. XI/1 & XII/9 (Col.) Silver.

Agrilus. viridis (Europe) (Col) Larvae feed on Beech wood. Ag. Rept 1868, p. 309. 105

Agrionidae (Gru) 1868, p. 309.

Agrionet. manicus (Col) Larvae known as wire worms feed on roots of grass & herbaceous plants &c.
 { mark. potatoes &c. Ag. Rept 1868 p. 94 fig 112. Salt recommended Ag. Rept 1870 p. 67 fig 8
 { D.G. XI/28 (Col)

Agrionet. hesus (Col) Larvae feed on roots of grass & herbaceous plants. I. wire worms. Ag. Rept 1868 p. 94 fig 112

Agrionet. truncatus (Col) habits & food same as above. Ag. Rept 1868, p. 94.

" { *segetis* (Col) (Europe) " " " " Ag. Rept 1868, p. 94.

Agromyzidae (Dip) flies the larvae of which are generally leaf miners. Ag. Rept 1872 p. 136.

Agromyza tritici (Dip) I. sucks grains of wheat when immature causing them to shrivel up.

{ Ag. Rept 1872 p. 136. They are destroyed a parasite *Diapris agromyzae* (Hym.) remedies
 { &c. D.G. IX/3 (Dip)

Agrotis (Lep.) Larvae commonly known as "cut worms", very destructive in fields pastures, and gardens

{ by cutting down vegetables & devouring them in their subterranean retreats. Ag. Rept 1864, p. 533.

" Localities injured. Ag. Rept. 1872 p. 122. Caterpillars, or cutworms D.G. XCIX/11 (Lep)

" of the Onion (Lep) Ag. Rept 1865. 260. remedies & onion culture. 1866, p. 30 m. m.

" of Cotton (Lep) Ag. Rept 1855, p. 66, fig 1 cuts off young plants of Cotton & crawls them into their holes

* *Ailanthus* Silk worm (Lep) Introduction. Habits. culture. silk experiments &c. Ag. Rept 1861, —
 { 374 to 382. as *Bombyx Cynthia* by Dr Jno G Morris. Mod. & additional observations with
 { figures, by Dr Morris in Ag. Rept 1862, p. 390. see also *Attacus* & *Samia*
 { D.G. Sp. Cocoon, XXI/4, Ins. XLVI/5. Samia cynthia (Lep.)

Ailanthus. Wood. value of &c. experiments with, at the Paris Exposition. of Insects, 1865. Ag. Rept 1865, p. 99.

Ailans. myops (Col.) purple line snapping beetle. I. feed on wood of Oak, Apple, pine. Ag. Rept 1868, p. 92.

{ D.G. X, fig 17. (Col)

Ailans. oculatus (Col) big eyed snapping beetle. Ag. Rept 1860, p. 321. I. in Apple, & oak wood. —

{ Rathbun Ag. Rept. 1861, p. 608, figs 57, 58. in Locust wood. 1865, p. 99; in decayed wood —
 { 1868, p. 92 fig 107. in Oak apple, yew. D.G. X/15 (Col)

Aletia. aryliflora (Lep.) latest name for *Anomis Xylinae*. The cotton army worm. see remarks
 { made by Prof. A. R. Grote, of Buffalo, N.Y. at the meeting of the Amer. association for the
 { advancement of science, held at Hartford, 1874, p. 128. See also *Anomis xylinae*. D.G. XIII/4 (Lep)

Aleochara. anthomyza (Col) destroys *Anthomyza brassicae* (Dip) a fly injuring cabbages. Report of
 { Dept. Ag. 1870, p. 66. fig 2. D.G. XLVI/9 (Col)

Alleorhina (Cotini) *nitida* (Col.) June bug. Ins. feeds on Sap of Maple, Beech, & other trees.

{ It eats into ripe fruit, especially of figs & hence in Florida is known as the Fig eater.
 { Ag. Rept. 1868, p. 90. fig 82. D.G. VII/19 (Col)

* *Alsewodes* (Hom) 1876 fig 55 p. found on *Corrus*. Tomato leaves, & Strawberry.

Alsewodes areolaris (Lep) Ag. Rept. 1844, p. 126. see *Unacampsis*. *Butalis*, & lastly *Geothica* D.G. XXVII/1

Alydus. ater (Het) I. m. & of *Alydus eumenes* Ag. Rept 1875, fig 17, p. 120 D.G. IV/26 (Het)

Alydus. eumenes (Het) fragments. Golden Rod, & smooth Sumach. Ag. Rept. 1875, p. 126, fig 16. D.G. VI/21 (Het)

Alydus. octonaculata (Lep) Eight spotted Forester. I. feeds on the foliage of the grape vine, —

{ Paris green will kill the caterpillar, but is apt to poison the fruit. Ag. Rept 1874, p. 129. . . .
 { D.G. I. letter C/2 number C/11 Ins. XLVI/1 L. LII/6. (Lep)

* *Amara* (Col) Some European species are said to destroy grain. Ag. Rept. 1868, p. 80-110. 116.

Amanita. muscaria. a fungus: poisonous to flies. Ag. Rept. 1872 p. 132.

* *Amanthium. muscatellorum*. Fly or Gall poison. a plant growing in the southern states poisonous
 { to bees. Ag. Report. 1872 p. 131.

American blight, a disease on apple trees, caused by an insect. see *Aphis lanigera* Hom. —

see *Eriosoma lanigera* D.G. III/21. (Hom.)

American Sackey moth, (Lep) see *Chlorocampa americana*. Ag. Rept. 1860, p. 321. (Lep) 95

Amphipila. gryphus (Hym) I. carries off & destroys caterpillars. Ag. Rept 1866. D.G. I/24 (Hym)

* *Agratis segetum* (Lep.) Europe. damage done in Picardy, France. Ag. Rept 1869, p. 632.

- Amphicerus*. (*Geotrichus* & *Aphate*) *lineatus*. (Col.) Charles Lewis Fowler, Ins. Trans. kills the twigs of
 { *Alarce*, *prairie*, *hickory*, *pear*, *cherry*. &c. Ag. Rept. 1868 pp. 99, 105. fig. 136. & 1872, p. 118, fig. 8.
IG. XVIII/26 & *XIX/9*. (Col.) (*Amphicerus*). (See also Ag. Rept. 1866 p. 321)
- Amphicepa*. (*Stalpa*) *lividatella*. (Horn.) Found on Brambles & Grass. Ag. Rept. 1870, p. 119, fig. 8. *IG. I/167* (Horn)
- Anabrus*. *simplex*. (Orth.) *menopis* cricket of Utah. destroys Grass, wheat, &c. It is eaten by Quails, &
 { Indians. Ag. Rept. 1871, p. 79, fig. 130. & 1874, p. 141, fig. 14. *IG. XIV/5*. (Orth.)
- Anacamptis*. (*Butalis* *Alucata*) *annulata*. (Lep.) Angoumois moth. injures corn, maize, wheat, grass.
 { South. &c. Ag. Rept. 1854, p. 67, pl. 4. remedies. 1864, p. 356. 1858, m. m. see *Gelechia IG. XVII/1*, (Lep.)
- Anarsia*. *lineatella*, see *A. pruinella*. Ag. Rept. 1872, p. 112. (Lep.)
- Anarsia*. *pruinella*. (Horn, *A. lineatella*, & *later*) (Lep.) Larvae destroy the ends of the twigs of
 { Peach trees. in Maryland, in spring. Habits remedies &c. Ag. Rept. 1872, p. 112, fig. 1.
IG. CVIII/3 (Lep.)
- Anasa*. (*Coreus* *Gonocerus*) *tristis* (Hbst.) Squash bug. L.P.S. injure Squashes, & pumpkins, by sucking
 { Sap & poisoning foliage. They are said also to destroy the Colorado Potato beetle.
Strophthora decemlineata. (Col.) Ag. Report. 1875, p. 120, fig. 18. See also under *Gonocerus* & *Coreus*
IG. II/14. (Hbst.)
- Anatis*. (*Cochylinella* & *Mysus*) *15-punctatus*. (Col.) destroys Cotton aphides. Ag. Rept. 1854, p. 85, pl. 8,
 { *IG. XXV/37*. (Col.)
- Anbury, a disease of Turnips, once attributed to *Inchocera hyemalis*, or the Turnip gnaw (Lep.)
 { of Europe. Ag. Rept. 1872, p. 123, fig. 15. *IG. X/31*, 32. (Lep.)
- * *Aneclochira*. *lineata*. (Col.) see *Buprestis*. Ag. Rept. 1868, p. 91. *IG. XI/13*. (Col.) (Food pine.)
- x *Aneclochira*. *striata*. (Col.) frequents Spruce, Spruce. Ag. Rept. 1868, pp. 91 & 113, 115, fig. 95. See *Buprestis*,
 { *IG. XI/12* (Col.)
- Anchylopera* *vaccinaria*. (Lep.) Cranberry or fene worm. Ag. Rept. 1868, p. 207. (Fish) & Ag. Rept.
 { 1870, p. 85, fig. 50. *IG. C/1*, fm. Pack. (Lep.)
- Angoumois moth. See *Gelechia*, *Coreatella*. *IG. XVII/1*. (Lep.)
- Animalculæ*. Fungi &c. origin. Ag. Rept. 1864, p. 329
- Animals. in garden of acclimation, Paris. Ag. Rept. 1865, p. 95. (Cattle, goats, sheep, &c.)
- Animals, & Birds, by Hennicott Ag. rept. 1856, pp. 52, 6, 110, with plates. 1857, pp. 72, to 107, no plates.
- Animals, acclimation & domestication. (L. Craig.) Ag. Rept. 1859, p. 207.
- Anisopteryx* *vernata*. (Lep.) Canker worm. I. destroy foliage of Apple, Elm, Cherry, &c. Remedies Habits
 { &c. Ag. Rept. 1864, p. 554. destroyed by *Canisoma scrutator* (Col.) & *Canisoma fraternus* (Hym) -
 { Ag. Rept. 1866, pp. 39, 43. remedies, &c. 1870, p. 84, fig. 29. - 1874, p. 139. - 1875, m. m.
IG. LXXVIII/7. Ins. LXX/16, 17. (Lep.)
- Anisoscels* ? (Hbst.) Ag. Rept. 1866, p. 61, on Cotton. - 1855, p. 94. resembles *Acanthophaea* Thomas
 { *IG. IV/11*. (Hbst.) (& is the brownish black *Anisoscels* of *IG. I/3*, p. 6, fig. 9)
- Anisoscels*. ? (Hbst) more mention. Ag. Rept. 1854, p. 91.
- Anisoscels*. *albicinctus*. (Hbst.) banded winged *Anisoscels*. of D.D.B. Ag. Rept. 1855, p. 94, fig. VIII, on
 { Cotton, Bolis. See *Leptoglossus phyllonipus*. *IG. I/21*. (Hbst.)
- Anisoscels* *nasutus*. (Hbst.) see *Acanthophaea femorata*. *IG. I/20*. Hbst. in Cotton fields.
- Anisota* (*Argyrocampa*) *rubicunda*. (Lep.) Larvae feed on foliage of Silver maple. Ag. Rept. 1870
 { p. 83, fig. 44. *IG. LXXVI/4*. Ins. LVII/9. (Lep.)
- Anisota* (*Argyrocampa*) *senatoria*. (Lep.) I feed on foliage of Oak. Ag. Rept. 1870, p. 83, fig. 43.
 { & is destroyed by *Tachnemon flus* (Hym.) 1866, p. 43. *IG. LXXVI/5*. Ins. LVII/15, 18. (Lep.)
- Anobium*. *pumiliatum*. (Col.) Ag. rept. 1849, p. 834.
 { *pertinax*. (") " 1849, p. 335.
Anobium. (*obovum*) *panicum*. (Col.) Ag. Rept. 1854, p. 72, pl. 5. injures wheat, & other grains.
 { 1866, p. 99, fig. 132. see *Sitotropha panicæ*. *IG. XIV/3*. (Col.)
- Anobium*. *striatum*. (Col.) Europe. known by the name of Death watch, from the ticking noise
 { made by them. Ag. Rept. 1868, p. 99. -
- Anobium* *Eschschum*. (Col.) Europe, habits same as above. Ag. Rept. 1868, p. 99. . . . *IG. LXXVI/1*

- John

6.

- Anthrenomus*, *pedicularis*. Col. Europe. injures flower buds. of Apple Pear. Agt. Rep. 1867 p. 90
pomerorum. Col. Europe.
prunicola, see *A. scutellatus*. (Col.)
scutellatus (*prunicola* syn) a curculio, the larva of which eats round holes into
the fruit of the plum. boring to the kernel & feeding upon its substance, usually
known by the name of the "rum gauger." Agt. Rep. 1867 p. 73 v. 1870 p. 71 fig. 5.
see *A. scutellatus*. S.S. XXXVII 23. & XL 24. 3. (Col.)
Anthrenomus quadrigibbus. (Col.) I eat round holes in Apples & Plums. Agt. Rep. 1867 p. 73.
1870 p. 70. fig. 14. S.S. XXXVI 40. 35. & XXXVII 28. 29. (Col.)
Anthrenomus signatus. (*signatus* syn) (Col.) Strawberry blossom weevil, I injures flowers of
strawberry so that they soon abortive. Agt. Rep. 1871 p. 73. fig. 3. (Col.)
Anthrenomus suturalis. (Col.) Ins. Cranberry weevil, cuts off and destroys buds & sometimes feeds
on berries of the cranberry. (Linn.) Agt. Rep. 1869 p. 207. & 1870 p. 70. & is destroyed
by a Chalcid (Hym)
Anthrax. (Dip.) destroys the chrysalis of a moth (Dip.) Agt. Report 1866 p. 44. Dip,
Anthrenus destructor. (Col.) see *A. varius*. Agt. Rep. 1868 p. 55. 318 109. 115. 116. (Col.)
" " *varius*. (*destructor* syn) (Col.) Insects in spring frequent flowers Larvae
injure or destroy dried skins, insect collections & specimens of natural history in
general. Agt. Rep. 1868 p. 58. & fig. 50. *Anthrenus varius* S.S. V 27. (Col.)
Aphate. (*Bostriachus*) *aspericollis*. (Col.) in pitch of Hickory. Agt. Rep. 1863 p. 91 & 1867 p. 71. & 1868
p. 99. *Bostriachus*. (Col.)
Aphate basilaris. (Col.) see Synoxylon. in Hickory Elm &c S.S. XIII 17. Synoxylon. Col
Aphis bicaudatus. Col. see Amphicerus. Apple twig borer S.S. XXVIII 26. & XIX 9. as *Amphicerus* (Col)
Aphidius. (Hym.) a four winged fly destroying Aphids on plant lice. Agt. Rep. 1866 p. 41.
Aphidius. S.S. IX 10. (Hym.)
Aphides & *Aphis*. (Hom.) plant lice. Agt. Rep. 1864 p. 39. - 1849 p. 339 - 1855 p. 67. & 107. - 1858 p. 260.
1863 p. 275. - 1868 p. 82 & 315. - 1870 p. 87. - 1871 p. 81 - 1872 p. 123 - 1873 p. 358 - 1874 p. 145.
Aphis americana (Hom.) oal aphid injures Barley Oats. Rye. Wheat &c Agt. Rep. 1876 p. 38.
S.S. III 15. (Hom.)
Aphis brassicae. (Hom.) Cabbage aphid, on plant louse. Red pepper a remedy. Agt. Rep. 1851 p. 52.
1873 p. 290
Aphis gossypii. (Hom.) Cotton aphid or "louse" this insect is very injurious to cotton when young.
- it sucks out the sap & weakens the plant. Agt. Rep. 1854 p. 63. pt. 3.
Agt. Rep. 1855 p. 17 fig. 2. — 1876 fig. 9. p. % see Mrs work on cotton insects. by 84.
S.S. III 14. (Hom.)
Aphis fabae. (Hom.) Bean aphid. Agt. Rep. 1849 p. 358. (Hom.)
Aphis. (on Grape) (Hom.) Agt. report. 1854 p. 97. pt. 6. % destroyed. by parasites.
Aphis. (on Hops) (Hom.) Localities injured. Agt. Rep. 1871 p. 73.
Aphis lanigera (Hom.) woolly aphid. or American Blight, remedied. &c 1864 p. 560.
1876 fig. 27. p. as *Eriosoma lanigera* S.S. III 21. (Hom.)
Aphis (on Orange). (Hom.) injures young foliage shoots. & is destroyed by *Eucyonus rubicus*.
(Het II 18. Agt. Rep. 1866 p. 40.) orange aphid see Agt. Rep. 1858 p. 260. (Hom.)
Aphis mali. (Hom.) Apple plant louse. Ins injures young shoots & foliage. Agt. Rep. 1876 fig. 37.
S.S. II 17. (Hom.)
Aphis persicae? (Hom.) peach leaf louse. 1876 p. (no fig)
" " " a sp. was found by Prof. Uhler. on both leaf and root. very injurious
in the peach orchards of Md which he thought resembled *A. artemesia*. of Europe
1870. no fig. p. but after wards he was somewhat doubtful (?)
Aphis subterranean. Hom. remedies. Agt. Rep. 1874 p. 361. (Hom.)
Aphis. (Hom.) damaged by *Aphidius* & *Tetraneura* Byn. Agt. Rep. 1866 p. 41. in eggs. *Schneemann* find
(Hym) 16 p. 42. & destroyed by *Pachys* & *Syrphus*. (Dip.) 1866 p. 44.
Aphis. remedies. Agt. Rep. 1864 p. 56. — 1870 p. 86. — more mention 1874 p. 145. S. Flower

- Aphodius*. (Col) *Ag. Rept.* 1865, p. 40, 85 1868, p. 86 v. 108. Col.
Aphodius. *pinetarius* (Col) fed on excrements of herbivorous animals. *Ag. Rept.* 1865 p. 39. — 1868.
 { p. 86 v. 111. fig. 56. — *IS.* VIII/2 (Col.)
Aphodius. *maulphenensis*. (Col) found on the stomach of pewee, flycatcher, together with *A. imitator*
 { & *sericeus*. *Med.* *Ag. Rept.* 1865, p. 539.
Aphrophora. (Hom) Spittle on Froth insect, Larva sucks the sap of plants, & covers itself with
 { a frothy liquid, which serves to hide it from birds, & other enemies. *Ag. Rept.* 1864 p. 539.
IS. I/11. (Hom)
Apt. albena. *arvensis*. (Hom) found on white pine. & supposed by the negroes to produce the
 { forest horse flies. *Med.* *IS.* II/36. (Hom.) (see also *Syn Membracis*. *Ag. Rept.* 1871, p. 25.)
Aphrophora. (Circopis) *quadrangularis*. (Hom) *Ag. Rept.* 1871, p. 24. said to injure the hay crop.
 { & found on Brambles. *Med.* *IS.* II/36. (Hom.)
Aphrophora. *Membracis*. *quadrinotata*. (Hom). (Eng spic) *Ag. Rept.* 1876, fig. 27. found on grass
 { *sericeus*. *Med.* *IS.* II/33. (Hom)
Aphrophora. (Hom) on Ragweed. *Ag. Rept.* 1876, p. 25. *IS.* I/11. (Hom)
Aphronemus. (*Reduvius*) *spissipes*. (Het.) destroys other insects, & is said likewise to kill honey bees.
 { *Ag. Rept.* 1875 p. 130 fig. 43. — *IS.* VI/24 (Het)
Apis. see also *Bee*. (Hym)
Apis *acraeensis*. Honey bee of the east Indies. *Ag. Rept.* 1866, p. 32. (Hym)
 " *atlantici*. " " " Senegal. " " " " " "
 " *fasciata*. " " " Egypt & Syria. " " " " " "
 " *indica*. " " " India. " " " " " "
 " *labressa*. " " " West Indies. " " " " " "
 " *lucicola*. " " " Italy (acclimated in U.S.) " " " " " "
 " *melifica*. " " " European domestic. " " " " " "
 " *trigona*. " " " S. America (stingless). " " " " " "
 " *unicolor*. " " " Madagascar. " " " " " "
Apple bark louse, or, scale insect. See *Aspidiotus*. (*Coccus*) *conchiformis*. (Hom) *Ag. Rept.* (Ethi.) 1860, 439
 { Oyster shell Apple bark louse. (scale oblong, eggs white). *Remedies*. — 1867, p. 73; — 1864, p. 561.
 { 1869, p. 336. — *Remedies* &c. 1870, p. 88, fig. 87. — 1876, fig. 49. see *Aspidiotus*.
IS. III/28. (Hom)
Apple bark louse. Native, or *Hemist bark louse* (Hom). *Aspidiotus*. (*Coccus*) *harrisi*. Scale on grass, pine
 { white, eggs red. injures apple bark of trees. *Remedies*. *Ag. Rept.* 1870, p. 88, fig. 58. 49
 { 1876, p. 73 fig. 50. *IS.* III/37. (Hom)
Apple blight, or incorrectly "American blight", caused by an insect *Aphis*. *Eriosoma lanigerum*.
 { *Remedies*, *Ag. Rept.* 1864 p. 560. — 1876, p. 41. see *Eriosoma* *IS.* III/21. (Hom)
Apple tree borer. see *Saperda* (*ovellata*) *candida*. (Col) *Ag. Rept.* 1863, p. 570. Larva bores
 { into wood of apple, &c. see *Saperda candida* *IS.* Ser. C/21. Ins. X/7. (Col)
Apple bug. (see *Whirligig*) see *Gyrinus*, a small black beetle, which swims in circles on the
 { surface of water, feeding on insects & when handled giving out a scent like apples.
 { see *Sinuentis* (*Gyrinus*) *americanus*. *IS.* III/14. (Col)
Apple Bark beetle. See *Chrysobothris* (*Pyrenestes*) *femorata*. (Col) Larva bores into the wood of
 { Apple trees. *Ag. Rept.* (Wier) 1866, p. 319. see *Chrysobothris femorata*. *IS.* LIII/25.
 { Ins. XI/15. & XVII/12. (Col)
Apple maggot, or fig. (Col) see *Synpeta pomonella*, Larva feeds in pulp of Apples. *Ag. Rept.* 1867, p. 72
 { *IS.* IX/14. (Col)
Apple midge. see *Sciara* (*Melobius*) *malis*. (Dip). Larvae found in injured apples. *Ag. Rept.*
 { 1872, p. 115. (Dip)
Apple, or *Codling moth*. (Lep) see *Carpocapsa*, *pomonella*. Larvae feed in the interior of the
 { fruit & render it worthless. For habits, remedies, &c. see *Carpocapsa pomonella*
 { *Ag. Rept.* 1854, p. 52, p. 7. — 1860 p. 315 — 1864 p. 355 — 1869, p. 536. — 1870, p. 86.
 { 1871 p. 375. *IS.* Lp. I, XV/8. *IS.* LXVIII/7. 8. (Lep) (syn *Penthina*) *IS.* lower.

- Y. Glover

- Baccha*, sp? (Lep) Larvae destroy the aphides (plant lice) on the orange & Ag Rep. 1866 p. 44.
 { §§. III/25 (Lep)
- Bacon beetle*, see *Deromaster cardanvis* (Col) Ag Rep. 1856 p. 29. - 1861 p. 595. - 1863 p. 569. - 1865 p. 589. §§. Lar. ap. 23 §. IV/27 (Col)
- Barid*, Spencer, F. C. origin of domestic Turkey. Ag. Rep. 1866 p. 288.
- Balaninus* (Col) nut weevil, destroys Acorns, Chesnuts, chinquapins, nuts. &c. &c. see also *Urevil* (Col) §§. XIV/9 & §§. XIV/10 as *Balaninus nasicus* (Col).
- Balaninus nasicus* (Savie. syn) (Col) L injures Chesnuts, huckle nuts, Acorns &c &c. Ag. Rep. 1870 p. 70 fig 13.
- Balaninus* (Savie) see *B. nasicus* (Col) Ag. Rep. Plathorn, 1861 p. 605, fig 46. 47. injures fruit of Chesnut.
- Chinquapin* &c. §§. XIV/10 as *B. nasicus* Col.
- Balaninus*, *rectus* (Col) Lar injures fruit of Chesnuts, Huckle nuts, chinquapins, Acorns. &c. Ag. Rep. 1870 p. 70. §§. XXXV/31 (Col)
- Bark beetles* (small) see *Tomids*, *Scolytus* &c. Lar. & Ins. injure Apple, Elm, Cedar, Birch, Pear & almost every fruit of forest tree. Remedies. 1863 p. 574.
- Bark* Col. or *Scale insects*, (Hom) see *Aspidiotus*, *Coccus*, &c. Ag. Rep. 1866 p. 42. &c. &c. (Hom)
- Baridius chloris* (Col) Europe form galls near root of Chelra Ag Rep. 1865 p. 90. Col.
- Baridius trinitatus* (Col) US Lar. burrows in the stalk. Ag. Rep. 1865 p. 90. see *Urevil*, §§. XIII/2 & §§. XIII/3
- Barid*, *trinitatus* (Col) see above *Baridius*.
- Basket*, worm. Hang worm (Lep) *Oekelicus* or *Oeceticus concolorum*. L almost omnivorous. feeding upon foliage of fruit of Forest trees, & in the neighborhood, is especially injurious to Red Cedars it is itself destroyed by the larva of an *Schneumon* fly *Cryptus inquisitor* (Hym) §§. II/5 Ag. Rep. 1864 p. 552. Remedies, habits, &c. — 1866 p. 61.
 { see *Thyridopterix ephemerae formis*. §§. XII/1 to 5 (Lep)
- Bean weevil* (Col) *Bruchus fabae* (Col) eats out the interior substance of field Beans. Larvae, several found in one bean. Ag. Rep. 1871 p. 375.
- Bean weevil*, *Bruchus varicornis* (Col) eats out substance of Beans §§. XIV/11 as *Meatlabris*. (Col)
- Bees honey*, see *Apis mellifica* &c. (Hym) Ag. Rep. 1866 p. 32. §§. IV/25, 630, (Hym)
- Bees*, wax & honey culture in Russia Ag. Rep. 1855 p. 120.
- " nature & habits with figures of comb (planned by L. J. F.) Ag. Rep. 1857 p. 10. pl. 2.
- " *Beekkeeping*. Treatment of temperature in winter &c. &c. Ag. Rep. 1860 p. 90.
- " in China, fumigated with *Artemisia*. &c. 1860 p. 92.
- " culture in Texas, by Buckish. Ag. Rep. 1860 p. 268.
- " length of life, Italian bees. exportation, to China. &c. Ag. Rep. 1861 p. 324.
- " *Italian bees*. Honey, by R. Colvins, Md. Ag. Rep. 1863 p. 531, to 546. §§. IV/25 to 30.
- " *Keeping*, by Mrs. Tupper. Ag. Rep. 1865 p. 458. to 475.
- " *Winter Keeping*, by Mrs. Tupper. Ag. Rep. 1867 p. 209.
- " *Egypt, & Syria*, see *Apis fasciata*. Ag. Rep. 1866 p. 32.
- " *Indian East*, " " *indica*, " " " "
- " *Indian West*, " " *laboresca*, " " " "
- " *Italian*, " " *agustica*, " " " " §§. IV/24.
- " *Madagascar*, " " *unicolor*, " " " "
- " *Senegal*, " " *adansoni*, " " " "
- " *Syrian*, " " *fasciata*, " " " "
- " *Stingless of S. Am*, " " *trigona*, " " " "
- Bees* *Keeping* statistics hives pasturage diseases food plants Honey &c. Ag. Rep. 1868 p. 272, 275, (Hym)
- " culture annals of by S. S. Adair Ag. Rep. 1870 p. 540
- " *Keeping*, Ag. Rep. 1871 p. 401. Artificial swarming & treatment. Ag. Rep. 1871 p. 388.
- " " profits of by A. C. Wait. Ag. Rep. 1873 p. 475
- Bees* are destroyed in Europe by *Clorus apicarius*, &c. Ag. Rep. 1868 p. 97.
- " (mason) " " " *Clorus alvearius*. " " " "
- Bees*, probably breed *Meloe angusticollis* (Col) in their bodies Ag. Rep. 1868 p. 102. Meloe §§. 22/3 §§. XXXVII/25 to 26
- " " destroyed by *Asclapias* or milk weed. Ag. Rep. 1872 p. 451. §. 2 lower

- Bees, honey, are killed by (*Uromorus spissus*) (Hes.) Ag. Rept. 1875, p. 130, fig. 23. (*Uromorus* Sp.)
 { SS. VI/24. (Hes.)
- Bees are likewise destroyed by *Asilus missouriensis*. Dtp. SS. IX/25. *Proctacanthus piniatophilus* (Lep.)
SS. X/34 & *Promachus bastardi*. SS. IX/22. (Hes.) (not yet in Ag. Rept.)
- Bee fly. *Bombylius* (Dtp.) hovers over flowers extracting the nectar with its long sucker. Ag. Rept.
 { 1867, p. 37. example. SS. III/18 (Dtp.)
- Bee-moth. (Lep.) *Galiera coreana*. Larvae destroy honey comb, & render hives filthy with their
 { web & feces, eventually causing the total destruction of bees & hives, the larvae, at least.
 Ag. Rept. 1866, p. 335, remedied. (SS. I/4. L.P.S. LXXXVII/4. (Dtp.)
- Beetle. French local name for *Rhynchites Baccus*. Ag. Rept. 1865, p. 90. Col. I. injures Apples
- Bed bug. see *Acanthia lectularia*. (Hes.) Ag. Rept. 1864, p. 553. & *medicus* D. 1875, p. 127, fig. 36. habits.
 { first introduction to England, 1858? SS. III/9 mag. (Hes.)
- Beetles. Coleoptera. article on food habits, &c. of Beetles with figures. Ag. Rept. 1865, p. 78.
- Bombardier (Hym.) eat & carry off other insects, such as flies &c. Ag. Rept. 1872, p. 132. example, 13 fasciate.
 { SS. VI/30 (Hym.)
- Bonhine. . . to destroy insects on plants. Ag. Rept. 1861, p. 332.
- Bonytus (Nid.) spinosus. (Hes.) Ag. Rept. 1875, p. 121, fig. 20. SS. III/10. (Hes.)
- Bonytus (Nidus) elegans (Europe) taken about roots & young stems of Root-Harrow (*Ononis asperula*)
 { Ag. Rept. 1875, p. 121. (Hes.)
- Belostoma? mere mention. Ag. Rept. 1863, p. 315.
- " " americana? (Hes.) Ind. aquatic, destroy Insects, fish, & probably fish eggs. Ag. Rept.
 { 1873, p. 134, fig. 6. SS. V/8 (Hes.)
- Bisulcatus. Ag. Rept. 1875.
- Bird. albanensis. (Dtp.) food of robins in spring. The larvae are said to injure plants. Ag. Rept. 1864, p. 460.
 { SS. II/7 (Dtp.)
- Big bed bug. see *Coronatus variegatus*. (Hes.) said to destroy bed bugs & suck blood of man &c.
 { Ag. Rept. 1865, p. 127. SS. III/19. (Hes.)
- Big eyed snapping bug (Beetle) see *Alaus oculatus* (Col.) Ag. Rept. 1860, p. 281. &c. L. in wood, &
 { Apple, Oak, & pine see. *Alaus oculatus*. SS. X/15. (Col.)
- Bill bug. of the pear. *Car. (Col.) injans* maine plant. & resembles *Sphenophorus caryosus* SS. XII/6.
 { (Col.) Ag. Rept. 1870, p. 68. SS. XII/6. (Col.)
- Birds. injurious to Agriculture. by L. Holmes, Maine, with figures. Ag. Rept. 1866, p. 111 to 160.
- Birds food of. Ag. Rept. 1860, p. 89. feeding & growth of American Robin. Ag. Rept. 1860, p. 89.
- Birds. in Europe killed & eaten, & the consequent multiplication of insects. Ag. Rept. 1860, p. 322.
- Birds. by E. L. Samuels. (Hes.) rept. 1863, p. 276. families, &c.
- Birds. — Bird laws & use as destroyers of insects by J. R. Lodge. Ag. Rept. 1864, p. 431 to 440.
- Birds injurious & beneficial with the insects found in their stomachs named but not catalogued
 { Ag. Rept. 1867, p. 201
- Birds value of Birds on the farm. by E. L. Samuels. Ag. Rept. 1867, p. 201.
- Birds as insect destroyers. Ag. Rept. 1870, p. 90 & 570.
- Birds of Vermont in relation to Agriculture & insects. by Professor Perkins. Ag. Rept. 1873, p. 47, 6.
- Biting Bird Lice. see Mallophaga. — in Orthoptera, example *Trichodectes*. SS. VI/8.
- Blackberry bark borer. (Hym.) see *Oncophanes bipunctata*. (Col.) Lar. here in hills of Blackberry & Raspberry.
 { Ag. Rept. (Harrison) 1861, p. 619. figs 52, 54. — 1863, p. 576. — 1869, p. 67. 1865, p. 159. & 1872, p. 67. SS. XIV/6. (Col.)
- Black horse fly. see *Tabanus atratus* (Dtp.). Ins. sucks blood of horses man &c. & other animals
 { Ag. Rept. 1872, p. 127. SS. IX/35. IX/40. Ins II/15 (Dtp.)
- Black weevil? *Sitophilus oryzae* (Col.) (also Rice weevil) I injures seed of Rice, Wheat, Vetch
 { grass is a southern species. *S. granarius* being more plentiful in the northern states.
 Ag. Rept. 1861, p. 603, p. 573. & 1863, p. 573. for remedies — 1854, p. 71 & 5. injures Wheat rice maize
 { 1849, p. 385. — 1858, p. 28. — 1866, p. 41. destroyed by *Meropis graminicola* (Hym.) *Calamita oryzae*.
SS. XIV/1. (Col.)
- Black weevil. name *Alevis* applied to *Sitophilus granarius*. see *Calamita granarius* n. *t. punctata*
 { SS. XIV/2. (Col.)

- Blattamericanus* (Orth.) Ag. Rep. 1862 p. 374, fig. 4, 6, 7. (Rathvon) remedies parasites &c
American Cockroach. said to be native. eats books, clothing - usually & in fact feeds
upon almost all animal & vegetable substances when hungry. See Pimplaster SS 1/23. (Orth.)
- Blatta germanica* (Orth.) Crotton lug. eats Animals, & vegetable substances. Books, clothing -
paper, leather. Great & Small Cockroach. Ag. Rep. 1870 p. 77. - 1874 p. 132, fig. 3.
remedies & see Ecobia germanica. SS 1/4. (Orth.)
- Blatta orientalis* (Orth. Ag. Rep. (Rathvon) 1862 p. 374, fig. 5. food same as above. said to
have been introduced from Asia. remedies &c. p. 375. - Oriental Cockroach. habit &
almost omnivorous. traps & other remedies. poison &c. Syrrethrum. & root of Poke weed
Thiobacca decandra. recommended Ag. Rep. 1874 p. 133, fig. 4. see Syllaryga orientalis.
SS 1/56. & VII/12 (Orth.)
- Blatta pensylvanica* (Orth.) habits & food same as the above. see Blattamodes. SS 1/13. (Orth.)
- Blattidae*. Ag. Rep. 1874 p. 131 &c. (Horn.)
- Blights*, Cotton, with few figures Ag. Rep. 1857 p. 126.
- Blissus* (Hbst) latest name for Microphus leucopictus, see Sist. of Hemip. of the region west of
the Mississippi river, by J.B. Leake, 1876.
- Blister flies*, native. NA species. Cantharis nittalli. (Cantharis, Epicauta cinerea is the old
Cantharis marginata.) (Cantharis Epicauta pensylvanica is the old Cantharis atrata
& Cantharis Epicauta vittata is the old Cantharis ruttata of Harris &c) &c
see also Sylla sp. (Col.)
- Black knot*, said to be a fungoid growth on Plum. & Cherry trees. Ag. Rep. 1874 p. 173.
see Sphaoma norbaja, Ag. Rep. 1863 p. 512.
- Blood sucking cone nose* (Hbst) Ins. sucks blood of man & beast, & also said to kill locust hoppers. Ag. Rep. 1873
fig. 48. Conothus variegatus SS III/19. (Hbst.)
- Blow flies*, or meat flies, see Calliphora. Lucilia. Sarcophaga &c Ag. Rep. 1872 p. 182 &c (Lep.)
- Boarmia* (Lep. Ag. Rep. 1855 p. 92. pl. VII fig. 4. eats cotton & orange. probably the larger species -
worm of Ag. B.
- Boehmeria nivea*, a plant producing fibre. Ag. Rep. 1865 p. 22. & 1866 p. 21.
- Boletothraus* (Boletothraus cornutus (Col.) frequent fungi. Ag. Rep. 1865 p. 100, fig. 164, see Boletothraus
viridis. SS XXVI/8. (Col.)
- Boletothraus*, viridis, syn Boletothraus cornutus (Col.) SS XXVI/8. (Col.)
- Bomb.* (Attacus) armonia (Lep. native of Bengal, & British India, food Castor oil plant.
Ag. Rep. 1861 p. 375. & 1863 p. 284. food. Nicotia. or palma Christi. remedies Attacus cynipis
in many respects. (Lep.)
- x *Bombus terrestris* Humble or Bumble bee. (Hym) beneficial as fertilizing certain flowers. &
injurious by eating holes in the calyx &c Ag. Rep. 1849 p. 338.
- Bombycidae*. (Lep) Ag. Rep. 1863 p. 314.
- Bombyliidae* (Lep) Ag. Rep. 1865 p. 45.
- Bombyliidae* - Bee flies. (Lep.) Ag. Rep. 1863 p. 317.
- Bombyx* (Attacus) bauchinis (or faidherbia) Hal. America, feeds on plant Bauhinia. Ag. Rep.
1865 p. 92. & 1866 p. 38. SS CXI/11. (Lep.)
- Bombyx* (Attacus) ceropria (Lep.) Ag. Rep. 1864 p. 323. 1865/93. 1866/36. 41 - 1867 p. 74
1868 p. 284. see Platysamia ceropria SS SS VII/9. XXII/5. XXVII/1. (Lep.) food Apple Plum &c
- Bombyx* (Attacus) damia cynthia. Litaneus silk worm (Lep.) food. Litaneus &c see. Ag. Rep. 1861
1861 p. 374. 1862 p. 390 - 1864 p. 542. 1865 p. 35. 92. - 1866 p. 37 - 1867 p. 74 - 1868 p. 284.
1870 p. 51. see Samia SS SS p. Coc XXII/4 (Lep.) (food also Castor oil plant?)
- Bombyx*, faidherbia. see Attacus bauchinis (Lep.) above
- Bombyx*, madrona (Lep.) feeds on Arbutus & other trees in South America & makes silken
nests composed of distinct separate layers Ag. Rep. 1861 p. 37. (Lep.)
- Bombyx*, mylitta (Lep.) Dutch Silk worm. wild in Bengal. feeds on leaves of Tigra tree. &
failed in being reproduced in France. Ag. Rep. 1863 p. 284. (Syn Antheraea peritha
(Lep.) SS SS CXIII/1. (Lep.)

- Bombyx mori*. (Sericaia) Syn. Lep. 1864 p. 485. 542. Fed on Osage Orange (*Maclura americana*)
 1865 p. 93 m m. — 1866 p. 35. destroyed by a large number of prolegs *Botrytis bassiana*. Fed on the
 Osage orange. Mulberry *Morus multicaulis*. M. morrelli. M. alba. Bois d'arc. or Osage orange.
 & - raised successfully on Osage Orange. 1867 p. 74. — 1868 p. 234. — 1869. p. 636. —
 1870 p. 82. Successful experiment raising silk worms on Osage orange leaves by Mr
 Cornaby of Utah. Secretary. — 1871 p. 7. D.S. S.P. Co. XXI fig. 12 & 16. S. 46/1. (Lep.)
- Bombyx* (Antheraea) *paphia*. a syn of *B. mylitta*. Ag. Rep. 1869 p. 284.
- Bombyx* (Antheraea) *gamma* mac. Steph. Japanese silk worm. feeds on Apple Oak. Ag. Rep.
 1865 p. 72. 1866 p. 58. 1868 p. 234. — 1870 p. 81. *Antheraea* also D.S. CIX. fig. 3. (Lep.)
- Bordered soldier (Lep.) (Hel.) *Sticticus umbratus*. destroys Colorado potato bug, & other insects.
 { Ag. Rep. 1874 p. 123. & 1875 p. 119. fig. 11. D.S. II/20. (Hel.)
- Botanocidæ*. (Col.) Ag. Rep. 1865 p. 91. & 1868 p. 99. &.
- Botanochus*. (Col.) Ag. Rep. 1868 p. 99.
- Botanochus*. (Clype.) *apicicollis*. (Col.) in path of Hickory branches. Ag. Rep. 1865 p. 91. — 1867 p. 71. — 1868 p. 99. (Col.)
- Botanochus*. (Botrychus?) *liracaudatus* (Col.) Apple twig borer. L. in wood of Apple twigs. with
 remedies. Ag. Rep. (White) 1860 p. 321. & 1868 p. 97. fig. 156 (Lar.) see *Umbrosus* D.S. XII/4. (Col.)
- Botanochus*. (Col.) Europe. shown at the Paris Exposition (1865 p. 91) as being destroyed by *Diadema*.
 { *Brontis*? & *Silvanus*? (Col.)
- Bot. Skin. of Cattle. *Hypodermia bovis*. (Lar.) L. in or under skin of Cattle. forming open
 ulcers. or sores. Ag. Rep. 1872 p. 129. fig. 184. (See also Syn. *Cetonia*) *Hypodermia*. D. VIII/21. D.S. 1864
1863
- Bot. Stomach. of horses. mules. &c. *Gastrophilus*. equi. (Lar.) L. in the stomach. Ag. Rep. 1872 p. 130.
 { D.S. I VII/34. D.S. IV/11. & VIII/22. (Lar.)
- Bot. head. of sheep. *Clinus Ovis* (Lar.) Ag. Rep. 1864 p. 353. (Ag. Rep. remedy, & 1872 p. 129. fig. 17. Larvae line
 { in frontal sinus of sheep. see *Cephalomyia ovis*. D.S. VII/36. (Lar.)
- Botrytis bassiana*. a fungoid growth destroying silk worms. Ag. Rep. 1866 p. 36.
- Braches. grassh. (Col.) 1868 p. 92. Ag. Rep. (Col.)
- x Bombardier beetle (Col.) see *Brachinus fumans*. Ag. Rep. 1868 p. 77. fig. 5.
- Brachinus fumans*. (Col.) (bombardier beetle) Insect lives under stones &c. & feeds on other insects,
 { it derives its name. from discharging a caustic fluid & apparently smoke. from behind. when
 disturbed. Ag. Rep. 1861 p. 571. m. m. & 1868 p. 77. fig. 5. D.S. I/4. (Col.)
- Brachys terminans* (Col.) m m Ag. Rep. 1868 p. 92. fig. 184. see *Brachys aerea* D.S. XI/36. (Col.)
- Braconidæ*. (Hym.) *kleinemon*. (Lar.) destroying the larvae of wood eating insects. Ag. Rep. 1866 p. 41.
- Bracon*. (Hym.) the larvae destroy the larvae of small wood eating beetles. &c. Ag. Rep. 1866 p. 41.
 { D.S. I/31. (Hym.)
- Brachytarsus varius* (Europe) (Col.) destroys the cocoon on pine. Ag. Rep. 1865 p. 91. D.S. Lar. Europ. D. 2. (Col.)
- Broad necked *Prionus*. (Col.) *Prionus laticollis*. Ag. Rep. (Rathvon) 1861 p. 612. figs. 68, 69. Larvae eat
 { wood. of decaying people. D.S. Lar. D. 34 Ins. XI/5 (supra *P. brevicornis*)
- Brochymena arborea*. (Hel.) a plant bug. very common here that sucks the sap of trees. Ag. Rep.
 { 1875 p. 117 fig. 4. D.S. II/16 (Hel.)
- Brontis planatus* (Col.) Europe. said to destroy bark beetles. *Scolytus* & *Botanochus*. Ag. Rep. 1865 p. 91.
- Brusca citharistes* (Col.) Europe. Ins. gnaws the stem of wheat. L. said to burrow in path. Ag. Rep.
 1865 p. 88. (Col.)
- Bruchus*. *Tabaci* (Col.) Bean weevil. habits &c. Ag. Rep. 1871 p. 75. (Col.)
 { *flavimanus* more mention Ag. Rep. 1869 p. 340. (Col.)
- Bruchus granarius* (Col.) Ins. frequents flowers. L. destroy beans peas &c. Ag. Rep. 1849 p. 340.
 1870 p. 71. fig. 20. see *Myelabris*. D.S. XLV/1, 2. (Col.)
- Bruchus obscurus* (Col.) field bean. Ag. Rep. 1870 p. 72. (Col.)
- Bruchus pisi* (Col.) pea weevil. Ag. Rep. 1849 p. 338. 1863 p. 574. p. 574. Remedies &c. — 1872 p. 71. fig. 21.
 Europe. mere mention in peas. — 1871 p. 375. eggs deposited on the surface of pods. fastened
 by a viscid substance. & remedies. — 1872 p. 123 Localities injured. see *Myelabris*.
 D.S. XVI/6. (Col.) D.S. Lar.

- Bruchus sinuatus* (Col.) field bean. Ag. Rept. 1870 p. 72. See *Mylabris*. IS. XIV/7. 100.
 " *varicornis* (Col) " " " " " " IS. XIV/2.
Bryaxis (Col) found on Swamp grass. Ag. Rept. 1863. fig 26. example *B. abdominalis* IS. XXV/1 (Col)
Buffalo tree hopper (Hom) see *Cercia lutealis*. Ag. Rept. 1864. p. 560. & 1876, fig 16. I sucked sap of
 { Apple, peach, grapes & willow. IS. I/29 & 2/32 (Hom)
Buprestidae (Col.). Ag. Rept. (Rathvon) 1861 p. 607. 8. Lar. fig. 54, 56. feed on wood of Apple, pear, cedar.
 { pine, peach, cherry, &c. 1863 p. 274-1864 p. 439. - 1865 p. 87. mm. 1868 p. 91. 109. 207 b°. Larvae.
 { feed in wood. Ins. found on logs, trunks of trees, & in flowers. (Col)
Buprestis (Col.) in cherry &c. wood remedies Ag. Rept. 1863 p. 466.
Buprestis (*Anaglochira*) *lineata* (Col.) Orange-lined Buprestis. Insect feeds on the tender
 { shoots of pine. Larva probably feeds in pine wood. Ag. Rept. 1868 p. 91 *Buprestis lineata*
IS. XVI/3 (Col)
Buprestis (*Anaglochira*) *striata* (Col) frequents spruce & pine. Ag. Rept. 1868 p. 91. 113. 115. IS. XI/12. (Col)
Buprestis? (Col) Ag. Rept. 1816 p. 39. - 1861 p. 634 fig 52. - 1863 p. 566. - 1865 p. 39. - 1868 p. 91. - 1870 p. 67. (Col)
Burying beetle, (Col) see *Neocrophorus*. Ins. bury small animals, birds, &c. under the earth.
 { in the bodies of which, they deposit their eggs, for example of which see *Silpha*
americana &c. IS. IV/15. 8. (Col)
Butalis (*Anacamptis*) *canebellae* (Lep.) Angamous moth. *L. exure* *maure* Com. Wheat, grass seed.
 { Ag. Rept. 1854 p. 67. p. 4. - 1864 p. 566. &c. &c. see *Gelechia Anacamptis* IS. XVII/1
Byrrhidae (Col) full beetle. Ag. Rept. p. 55. Ins. found in excrements of cattle, horses, &c.
 { (example *Byrrhus Cistela americana*) IS. V/11 (Col)
Byturus tomentosus (Col) Injures fruit, raspberries, blackberries &c. Ins. frequents flowers.
 { Ag. Rept. 1866. p. 81. 109. 116. IS. Larva A/20. (Col)
Byturus unicolor (Col) Ins. frequents flowers. Ag. Rept. 1866 p. 84. 109. fig 47. see *Tricagus* IS. XXXI/16. (Col)
Cabbage bug (Holt.) See *Strachia* (*Murgantia*) *histronicha*, or Harlequin bug. Ag. Rept. 1867 p. 71. fig
 { 1570. p. 90 habits & remedy. - 1871 p. 84, fig 18. - 1875 p. 116. fig 3. injures Cabbages, Turnips, &
 { cruciferous plants, it is destroyed by *Leptoglossus phyllopus* (Holt.) see *Strachia Murgantia*
histronicha. IS. II/22. (Holt)
Cabbage butterfly or worm (Lep.) European. see *Pieris rapae*. Ag. Rept. 1870 p. 79. fig 36. - 1872 p. 15.
 { IS. I.P. C/18. Ins. I/14 Ins. 90/2. (Lep)
Cabbage butterfly, of the north & East (Lep.) see *Pieris* (*Pontia*) *oleracea*, pothens *Pontia* or white
 { butterfly, feeds cabbages, pothens, turnips &c. Ag. Rept. 1870 p. 79. fig 37. IS. LXXIX/15. -
IS. CVI/28. - I. XXVII/7. XXXI/2. (Lep)
Cabbage butterfly of the Southern states (Lep.) see *Pieris protides*. Ag. Rept. 1870 p. 79. fig 38
 { injures cabbages, turnips &c. Ag. Rept. 1870 p. 79. fig 38. IS. Lp. II/6 Ins. XXXII/1. 12. Lep.
Cabbage cutworm (Lep.) *Pontia brassicae*? of Rathvon Ag. Rept. 1861 p. 592. is destroyed by a canabis
 { (Col). (is probably *Pieris oleracea*, as above mentioned?)
Cabbage flea beetle (Col) see *Haltica* (*Phyllotreta*) *striatula* see *Orchestes vittata* IS. XXIV/8. (Col)
Cabbage fly, or maggot, (Lep.) see *Anthomya brassicae*. IS. XXV/9. (Lep.) (injures roots Cabbage)
Cabinnat. Report of. see Museum Ag. Rept. 1864 p. 540
Cadelle. French name for *Trogosita* (Col) Ag. Rept. 1864 p. 540. - 1868 p. 83. - 1870 p. 66. see
 { *Trogosita mauritanica*. Catter. Ag. Rept. 1849 & 1866 p. 83. said to destroy the larvae of the wheat
 { weevil (but doubtful) & is found under bark in grain & in broad stages, see *Trogosita*.
Tenebroides mauritanica. IS. XXXI/1. (Col)
Coccigenae (Holt.) Ag. Rept. 1875 p. 123. IS. fig 40
Colletes inaequalis (Col) Grape fruit curculio. injures grapes Ag. Rept. 1867 p. 72. see *Meacetas*
IS. XXXVI/42. (Col)
Calamagrostis gracilis (Col) Europe (I called to Saperda) pierces stem, boring through joints, &c.
 { hibernates in the lower part of the plant. Wheat. Ag. Rept. 1865 p. 89. (Col)
Calandra palmarum (Col) Ag. Rept. Rathvon. 1861 p. 604. Palm weevil (Sonagon) - may prove
 { to be *Rhyncophora* (*Zimmermanni*) *caudatus*, or *Salick* P IS. XIII/21. (Col) J. Flower

- Calandra granaria*. (*Sitophilus granarius*) (Col) Grain weevil. Injures wheat, & other grains.
 { Ag. Rept. 1849 p. 355. — 1854 p. 71. — 1858 p. 23. — 1861 p. 603. — 1863 p. 573, remedies &c.
 sa *Calandra nematophanta*, (syn. *granaria*) SS. XIV/2 (Col)
- Calandra oryzae*. (*Sitophilus*) (Col) Rice weevil. Ag. Rept. 1852 p. 533, 1854 p. 71, Pl. 5 — 1861 p. 603.
 1863 p. 573. Injures Rice, Wheat, maize, &c. sa *Calandra Sitophilus oryzae*. SS. XIV/1 (Col)
- Calandra oryzae*. (Col) destroyed by *Metoporus grammicola* Hym. Ag. Rept. 1866 p. 21.
- Cavatus latus* (Col) Europe. said to injure young wheat. Ag. Rept. 1863 p. 50 (Col)
- Calphagon*, barbatus (Col) *Pronotus* Bruch. large snout being 3 inches in length. Rathvon. in
 { Ag. Rept. 1861 p. 611.
- Callidium* (*Carpus* error) *vapulus*. (Col) 1861 Rathvon. 1861 p. 616. Laid on wood of Oak & pine.
 { Said to be able to bore through lead. see *Hydrotripes vapulus*. SS. XVI/3 (Col)
- Callidium violaceum*. (Col) 1 Rathvon in Ag. Rept. 1861 p. 616. fig. 75-76. found in pine wood. and
 { under bark. sa *Cantennatum*. SS. XVI/4 (Col)
- Callionotus*. (Hym) parasitic in *Diplosis tritici*. Ag. Rept. 1872 p. 127. (Hym)
- Calliphora vomitoria*. (Dip. & injure. most by depositing eggs on it. which hatching to maggots.
 { destroy it rapidly. Ag. Rept. 1872 p. 132. fig. 20. SS. VI/21 (Col)
- Calocoris*. (*Capsus*) *maculatus*. (Hom) common on weeds in Maryland. Ag. Rept. 1875 p. 125 fig. 32.
 { SS. 1/10 (Hom)
- Caloptenus*. (*Abrudium*) *femur rubrum*. (Orth) Red legged grasshopper in the eastern States.
 { very destructive to gardens, & field crops, when numerous. injure fruit trees, grasses.
 { Ag. Rept. 1866 p. 29. — 1867 p. 65. fig. — 1872 p. 76. fig. 32. fruit trees — 1873 p. 78. fig. 12.
 { mere mention — 1872 p. 121. — 1873 p. 55. — 1874 p. 157. fig. 8. Remedies — &c.
 { SS. V/22, VIII/2. (Orth)
- Caloptenus*. *spurius*. (Orth) Halfpenny — Rocky mountain, or Western grasshopper Ag. Rept. 1861 p. 29.
 { exceedingly numerous & destructive in the extreme western states, & Rocky mountains
 { said not to be found in the east. general notes. — 1867 p. 65. — 1870 p. 76. fig. 31.
 { habits remedies &c. — 1871 p. 78. fig. 11, m. m. — 1872 p. 121. Localities injured. — 1873 p. 155. m. m.
 { 1874 p. 126. 136. fig. 9. Localities injured, Colorado, Neb. Kans. Tex. &c. latest remedies, habits
 { History, &c. SS. VIII/1 & young XIII/15. (Orth)
- Caloptenus*. *femur rubrum*. &c. is attacked by a small red mite. see *Astronotus semitorum*.
 { Ag. Rept. 1874 p. 138 (see also *atomus*)
- Calosoma* (Col) *L. S. praedatorius*. Ag. Rept. 1865 p. 91. (Col)
- Calosoma*. *calidum*. (Col) Rathvon in Ag. Rept. 1861 p. 591. In L. fig. 6. destroy caterpillars & other
 { insects. — 1866 p. 39. — 1868 p. 79. fig. 3. destroys army worm *Scenecia (unipuncta)*
 { extranea. — 1874 p. 123. destroys Colorado potato bug. *Chrysomela (Loryphora)*
 { decemlineata. SS. I. 3. 1/10. 11. & D/2. (Col) (Sns. spotted with golden dots)
- Calosoma*. *scutellator*. (Col) L. S. destroy other insects. Ag. Rept. 1861 p. 592. — 1866 p. 39
 { 1868 p. 79. (no fig) SS. 1/2 (Col)
- Calosoma*. *vicinior*. (Col) Rathvon in Ag. Rept. 1861 p. 592. m. m. (Col)
- Calosoma*. Col (Europe) destroy other insects. Ag. Rept. 1865 p. 91. (Col)
- Comptotheria* (Col) error! should be *Comptotheria*. (*Omalophila*) *seneca* (L)
- Camel Crickets. see *Mantidae*. (Orth) Ag. Rept. 1874 p. 133. Orth. SS. 11 plate
- Campyloneura*. (*Capsus*) *vitivernensis*. (Het) destroy the Grape vine leaf hopper. incorrectly called
 { the Grape vine *hopper*. *Campyloneura vitis* (see Hom) Ag. Rept. 1871 p. 237. found on Oak
 { but destroys the grape vine leaf hopper. — 1875 p. 125. fig. 30. SS. VIII/3 (Het)
- Canker worm. *Oniscophora vernata*. (Lep.) L. destroy foliage, of Apple, plum, Cherry &c. Ag. Rept.
 { 1864 p. 534. Remedies &c. — 1866 p. 43. — 1870 p. 55. fig. 49. 1871 p. 123. Localities injured
 { SS. I. XVIII/7. Ins. LXV/16. f. (Lep)
- Cantharidae*. *Cantharides*. (Col) Blister or potato flies (some of our native species are used for
 { blisters (see Blister) see also *Cantharis*, *Epicauta*, *Syllis*, *Macrolasis*, *Pomphodex* &c.
 { remedies added Ag. Rept. 1859 p. 103. — 1863 p. 55. 569. 1866 p. 39. — 1868 p. 126. &c. Co
 { J. G. Love

Ceratonia amygdali, (*quadricornis*, Syn) (Lef.) Royal Walnut moth, the caterpillar feeds on Elm & Alder. It is infested with small Ichneumon flies the larvae of which make cocoons agglutinated together like honey comb. IS. pt 4/11 (Hym.) *C. amygdali* IS. LXIV, 114/149 see Ag. Rep. 1866 p. 12.

Cercopis bicincta, (Hom) found on meads, Brambles, and grass. Ag. Rep. 1876 fig 23 IS. I/43 (Hom)

Cercopis obliqua, (Hom) frequents black alder. Ag. Rep. 1876 p. 29. see *Clastoptera*. IS. II/15 (Hom),

Cercopis proteus, (Hom) frequents cranberry. & Blackberry, Lutes. Ag. Rep. 1876. fig 22. see *Clastoptera* IS. II/15 (Hom)

Cercopis quadrangularis (Hom) frequents grass & brambles Ag. rep. 1876. fig 24 see *Aethnophora* IS. I/35 (Hom)

Cenostoma brassicella, see *Plutella limbipennella*. (Lep.) caterpillars eat Cabbages. It is itself destroyed by a small Ichneumon fly. Ag. Report. 1866 p. 41 (Hym.) feeds on Cabbages. 1877 p. 92. fig 16. *Plutella limbipennella*. IS. XX/23. & LXVIII/30. 31. (Lep)

Cneda bubalus, (Hom) Buffalo tree hopper, perforates a row of small holes. Lengthwise of the twig in fruit trees. Ag. Rep. 1866 p. 560. — injures twigs of Apple, peach, grapes, & willow. IS. I/29. II/32. (Hom)

Cneda decora, (Hom) injures twigs of apple, Peach, & Grapes, as above Ag. Rep. 1876 fig 16. IS. I/27 (Hom)

Cetoninae, (Col) Ag. Rep. 1861 p. 601. & 1863 p. 274. *Cetonini*, (Col) m.m. Ag. Rep. 1868 p. 87. (Col)

Catonina, (Col) Ag. Rep. 1861 p. 601. & 1863 p. 298. (Col)

Catonina hirta (Col) Europe Ag. Rep. 1868 p. 90 injures of Apricot

Catonina, (*Euryomia*) *inda*, (Col) Ag. rep. p. 96. pl. VIII fig 10. frequents Cotton bolls. — 1863 p. 58. cat. {into fruit of peaches, & spreads upon the sap of trees. remedies. & see *Euryomia*. IS. IX/29 (Col)

Catonina (*Euryomia*) *melancholica*, (Col) dark shaded *Catonina* of L. J. B. on Cotton bolls. Ag. rep. 1856 p. 61. {1855 p. 96 pl. VII fig 9. & 1863 p. 89. frequents bolls of cotton. see *Euryomia melancholica* IS. XXIV/30 (Col)

Cutorhynchus ? *affinis* (see also *Phyllobius*?) (Col) L. eat out blister like spots on leaves of tulip poplar {cocoons formed on the blister like spot, between the outer culicles of the web. Ag. Rep. 1870. p. 68. fig 11. IS. XL/18 (Col) (Pupa formed in a cocoon).

Cutorhynchus macula alba, (Col) Europe. found in poppy heads. Ag. Rep. 1866. fig 90. (Col)

Chaffers, see *Sachnastoma*. *Melolontha* &c. (Col)

Chalcididae, (Hym) on Orange Coccus, or scale insect. Ag. Rep. 1862, p. 112. 8. (Hym)

Chalcis ? (Hym) destroys the larva of *Chrysobothris femorata*. (*syn calcarata*) (see *C. flavicollis*) {in Apple & oak wood. Ag. Rep. 1866 p. 62. as *Chrysobothris flavicollis*. IS. XI/7 (Col)

" — destroys, Cranberry gn. at, *Cecidomyia*, Ag. rep. 1868 p. 172 m. m. & 1869 p. 207. (Hym)

" { " *Anthonomus sulcatus*, (Col) on Cranberry weevil Ag. Rep. 1869 p. 207 " { example *Chalcis flavipes*. IS. III/22 (Hym)

Chalcis ? *Parasitic* in *Cecidomyia*, *destructor*. or *Hessian fly* (Lep) Ag. Rep. 1872. p. 126. (Hym)

Chalcophora liberta, (Col) L. fed in Pine wood. Ag. Rep. 1868 p. 91. 113. IS. XI/9 (Col)

Chalcophora virginica, (*virginensis*) (Col) Ag. Rep. (Stathov) 1864 p. 53. fig 53. injures wood of {Pine. — 1868 p. 91. fig 89. *C. virginensis*. IS. XI/19 (Col)

Charancon, *d'argenti*, (Col) French common name for *Polydrosus sericeus*. Ag. Rep. 1866 p. 9. (Col)

" *de grosseller*, (Col) " " *Polydrosus planifrons* " " "

{ destroys grosselleries (Col).

Chauliognathus americanus, (*syn pennsylvanicus*) Ag. Rep. XII/123: see *C. pennsylvanicus* {see sold and more common name. (Col) *C. americanus* IS. XI/12 (Col) or *Cozab*

Chauliognathus marginatus, (Col) Ins. frequents flowers of Cotton &c. in the portion in which is said to feed. Ag. Rep. 1855. p. 89. pl. VII. fig 10. & 1868 p. 66. IS. XI/12 (Col)

Chauliognathus pennsylvanicus Col. I. frequents flowers of cotton &c. feeding on them. Ag. Rep. 1855 p. 89. pl. VII. fig 9. — 1868 p. 96. fig 129. *C. americanus*. IS. XII/11 (Col)

Chermes see *Coccus* *levis*, used as a dyeing material, (Hom) feeds on Evergreen Oak (Europe)

Ag. Rep. 1866 p. 33 example *Chermes coccineus* II/43. (Hom)

Chermes Pear. (Hom) see *Psylla pyri*. Ag. Rep. (Chien) 1864 p. 314. IS. II/10

- Cherry, or Pear, slug. *L. injures* the foliage. Remedies. *Ag. Rep.* 1860 p. 527. see *Selandria*.
 { *ceresi*. *Ag. Rep.* 1860 p. 315. eats *paranichma*. of leaf of Pear & cherry. — 1870 p. 78.
 fig 36. *L. injures* fol. of pear & cherry. see *Selandria ceresi* *IS. IX/39*. (Eym)
- Chestnut weevil, (Col) *Ag. Rep.* (Rathvon) 1861 p. 605. *L. feeds* in Chestnuts. b^e see *Balaninus*
 { *Sayii nasutus*. *IS. XIV/10*. (Col)
- Chigger, or Tigger, see *Sorocapsylla penetrans*. a species of flea, the larvae of which hatching
 { in the flesh of mankind, form troublesome sores. the insect generally prefers the
 foot, & buries itself under the toe nails. Remedy. *Ag. Rep.* 1872 p. 186. see *Sorocapsylla*
penetrans. *IS. XIV/10*. (Dip.)
- Chilocorus (*Coccinella*) *lividus*. (Col) destroys the coccus of the Orange. & *Aspidiotus florosi*.
 { *Ag. Rep.* 1858 p. 261. — 1863 p. 579. — 1865 p. 91. destroys, bark or scale insects on
 pine. (*Aspidiotus perniciosus* Thomson) 1866 p. 39. destroys bark lice see *Chilocorus*
lividus. *IS. XXV/36*. (Col)
- Chinich bug, (Hob) see *Microplus*. (Blissus) *Eucyrtus*. *IS. II/16. 17*. (Hob)
- Chinese method of taking honey. *Ag. Rep.* 1860 p. 91.
- Chion (*garganicum*). *cinctus*. (Col) — *Richom* honor. (Rathvon) *Ag. Rep.* 1861 p. 604. *L. eat*
 { wood of Hickory. Apple, & it is said to have even eaten through Lead see *Chion*
cinctus *IS. X/3*. (Col)
- Chilocatus. *Scutigena*. (Orth) *Ag. Rep.* (Rathvon) 1862 p. 387. feed grass & herbage, see
 { *Stenobothrus*. *IS. VI/15*. (Orth) (Some resemble immature specimens.)
- Chlorops. (Dip) *L. injures* grain. wheat, Barley, rye. & *Ag. Rep.* 1872 p. 184. — in Europe injures
 { grain, by destroying the central shoot. 1872 p. 184. (Dip)
- Chlorops *pic.* Europe (Dip) injures Barley in Northern Europe to the amount of \$100,000 in
 { one year the larvae live in the grain causing it to shrivel up. *Ag. Rep.* 1872 p. 184 (Dip)
- Chlorops *taeniopus*. (Eym) (Dip) *L. injures* wheat, & Barley, causing a swelling of the joint.
 { called "eat" & is destroyed by *Celonus rufus*. (Hym) *Chlorops taeniopus*. *IS. X/1*. (Eym)
- Chlorops. *Life* in Europe is destroyed by a *Phaenocarpa* (Hym)
- Chrysobothris. *calcarata*. — (Col) — see *C. floricola* (Col) the larvae. Flat headed Apple borer.
 { *L. injures* apple, peach, & oak, by boring in the wood. *Ag. Rep.* 1868 p. 92 & 1870 p. 67.
 { see *Chrysobothris floricola* *IS. XI/7*. (Col) (feed also, wood of white oak)
- Chrysobothris *dentipes* (Col) *L. feed* in Oak wood, "Tooth legged Buprestes" *Ag. Rep.* 1868 p. 92
 { *IS. XI/18* (Col)
- Chrysobothris. *temoralis*. (Col) *Ag. Rep.* 1861 p. 608. m.m. Apple Buprestes, or thick legged Buprestes.
 { *Ag. Rep.* (Uhler) 1869 p. 319. *L. bore* into the wood of Apple. — with remedies. &
 { 1866 p. 52. in Oak & apple wood & is destroyed by a Chalcid. (Hym) — 1868 p. 92 fig 97
 { in wood of Apple, peach, & oak. (Thick legged Buprestes). — 1870 p. 67. *Chrysobothris*
temoralis *IS. X/15* var. *Alabama*. & *XV/12*. (Col)
- Chrysobothris *harrisii*. (Col) *L. feed* in White pine wood. *Ag. Rep.* 1868 p. 90. *IS. XXXIII/33*. (Col)
 { " in Maple (Col) in Maple *Ag. Rep.* 1870 p. 67. Remedy soap. (Col)
- *fulvopilata* (Col). see *Metanophila*, *Ag. Rep.* 1868 p. 97. *L. prob feed* in wood of white pine
 { *IS. XI/9*. (Col)
- Chrysomela (Col) Europe. *L. feed* on foliage of trees shrubs, & herbage. & *Ag. Rep.* 1865 p. 91. — 1863 p. 308 (Col)
- Chrysomela *decimlineata* (Col) Crotch see *Doryphora 10. lineata*. or the Colorado Potatoes bug.
 { 10 lined speckman &
- Chrysopa. or Lace wing fly. (New) Larvae feed on Aphides or plant lice. & *Ag. Rep.* 1864 p. 650
 { example. *IS. VI/3*. (New) (also 1866 p. 40.)
- Chrysopa. (New) *L. destroy* the eggs of *Anthomyia cecanum*. (Eastern Onion fly) (*Ag. Rep.* 1872 p. 133 New)
- Chrysopa. *floricornis*. *L. were* mention. *Ag. Rep.* 1870 p. 514. more mention. (New)
- Chrysopa. (Dip.) Golden eyed forest fly. "Ear fly of the west." from its habit of attacking
 { horses chiefly about the head, & ears. *Ag. Rep.* 1863 p. 276. — *Ins sting* or bites
 { horses & it sucks their blood. *Ag. Rep.* 1872 p. 139. fig. 16. example *Chrysopa vittata*.
 { *IS. XI/18* (Dip.) *J. Glover*

- Cecis* (Step.) Caterpillars feed on Cloves. Ag. Rep. 1864, p. 548. example *Cecis Philodora*. 38.
 See 117. In XXXII/1. G.H. 1868 var. 1/3 (Step)
- Collops quadrimaculatus* (Col) Ins. frequens flavesc. Ag. Rep. 1868, p. 96, fig. 131. 38. 21/25.
Colorado potato bug (properly beetle, or ten lined specimens) see *Chrysomela* (p. 100) (p. 100)
decem lineata. feeds on Potatoes. Solanum. Egg plant. &c. Ag. Rep. 1866, p. 23.
 1871, p. 74, fig. 4. Origin history, in creeds & remedies. 1863 p. 573 - 1864, p. 511. - 1866, p. 2.
 1867, p. 63. - 1866, p. 79, fig. 6. 234/501. - 1869, p. 536. - 1874, p. 75. 75 - 1874, 75. - 1872, p. 126. 1871 - 1874, 75
 1871, 122. - 1875, p. 116. 130 74. 75. see *Chrysomela*, *Doryphora* 10 lineata 38. 21/25. (Col);
Colorado potato beetle. false. see *Chrysomela* (*Doryphora*) *juncta* (Col) Ag. Rep. 1874, p. 103, fig. 23.
 1867, p. 65 4. fig. see *Chrysomela* *Doryphora* *juncta* 38. XXV/27. & XXIX fig. 34 Col.
Colydiidae (Col) Found under bark, in earth. Ex fange. Ag. Rep. 1868 p. 63. 100 5. example *Colydium*.
 { *lineola*. 38. XXXII/4 (Col)
Colydium, see also *Autumnus*. Ag. Rep. 1868, p. 83. (Col)
Columbae (nat. Dip.) see *Simulium columbae* Schenck. Ag. Rep. 1872, p. 128. 2 h. leaves. Costa.
 In Hungary by their poisonous bite. see *Simulium*. 38. 2 p. A 36. Ins. XII/5. (Dip)
Comptosia (*Amelopsis*) *vestertina* (Col) I injure foliage of Sweet briar & rose. Ag. Rep. 1868.
 p. 87, fig. 68. see *Derisio vestertina*. 38. IX/17. (Col)
Conocéphalus, (Orth) more mention. Ag. Rep. 1871, p. 80. 38. IV/12. (Orth)
Anorhynchus (*sanguinea*) *variegata* (Hes) big bed bug. Insect. stings or pierces flesh of man & kind.
 & also *derisio* gemine bed bugs. (*Acrothia latellaria* (Hel. 38. p. 111, fig. 9. 2, Ag. Rep. 1875, p. 127.
 as *Coronatus* *variegatus*. 1875, p. 131. fig. 48. v. 38. III/19. (Hes)
Conotrachelus (*Orthochorus*) *nemator* (Raf) or Plum weevil, or Curculio. Ag. Rep. 1864, p. 84, fig. 7.
 1855, p. 311. - Ag. Rep. (Wiler) 1860, p. 84, makes small crescent shaped incisions in fruit,
 in which to deposit its egg, which hatching into a small footless maggot, the larvae,
 having a small head, Eats its way to the stone, & destroys the fruit & is exceedingly
 injurious to plum orchards. - Ag. Rep. (Rathbun) 1861, p. 600, fig. 81. plum weevil.
 injures fruit of plum, Apple & cherry. - 1862, p. 570. injures plum, nectarines, peach
 Apple, pear, Cherry, quince & walnut. & remedies recommended - 1868, p. 440. *Conotra-*
chelus nemator in destructive habits & manner of injury, resembles somewhat *Orthochilus*
curculionis (in the place exposition) which attacks the plum. - 1870, p. 69. Ransom's
 remedy of laying pieces of loose bark on the ground under the trees, described. &
 1871, p. 374. only one brood annually, & recommendation, of chips or pieces of shingle laid
 under the tree under which the curculio's take shelter during cold nights.
 Jarring the trees at night recommended. also a statement that three fourths of the larvae of
Curculionis were killed by a parasitic Hymenopterous insect. (*Sigalphus curculionis*) in 1869.
 (Riley). - 1871, p. 47. remedies suggested. & parasites mentioned. *Sigalphus curculionis*
 (Hym) - & *Ponera conotrachelus* (Hym). - 1872, p. 123. remedies. dust, flowers
 with road dust, & sulphur. - burn leather? - The Plum weevil said to be
 destroyed by a Heterosternous insect. (*Phlebotus lundus* (*Eragrostis* *viridis*) 38. XIV/5 (Col)
Coprophora, cornuta. Orth. Hesh. Para. more mention. Ag. Rep. 1871, p. 81. Orth
 " " " *gracilis* (Orth) 1868. Nepe. Maranon. " " " " " "
Coprophora (*Coprophora*) *micronata* (Orth) new species taken also in the greenhouse of the
 Department of Ag. Ag. Rep. 1871, p. 80, fig. 14. 38. 21/25. (Orth). VIII/14
Copris (Col.) (by some called Tumble bug) Ag. Rep. 1868, p. 307.
 injures carnations (Col) Ag. Rep. (Rathbun) 1861, p. 600, fig. 38. form balls of excrements in which
 to deposit eggs. & fed. on animal excrements. 38. VIII/17 (Col)
Copridae (Hes) plant bugs. Ag. Rep. 1868, p. 312. (Hes)
Coprus (*Donocorus*) *tristis* (Hes) squash bug injures squashes & other cucurbitaceous by sucking
 saps & debilitating plants. Ag. Rep. 1870, p. 79. - 1873, p. 122, fig. 18. see *Anas* 38. 11/14. (Hes)
Covimelaena (Hes) injures grafted cherries Raspberries Strawberry & other fruits see Ag. Rep.
 1875, p. 116, fig. 1. example *Covimelaena atra*. 38. IX/15. (Hes) 39 lower

- Conixa fumorata* (Hbst.) eggs used as food for mankind, Ag. Rep. 1866, p. 38. *habits aquatici.* (Hbst.)
 " " or *mercenaria* (Hbst.) Hab. Mexico. Ag. Rep. 1875, p. 134. *aquaticus in habitis.* & the eggs when made into cakes under the name of *Haaville*, and by the Mexicans, as an article of food. (Hbst.)
Conixa interrupta (Hbst.) *aquaticus.* Ag. Rep. 1875, p. 61. *destroy* other insects frequently water. -
 { SS. V/7. (Hbst.).
Corn. (Indian) see *Maire*, & sometimes used in a general sense as when speaking of wheat &c.
Corn moth. (grain) Lep. - *Hoff* or grain moth, see *Tinea granella* Ag. Rep. 1854, p. 536, remedy 1864, p. 332. & erroneously named *Heliothis* by D. J. B. Ag. Rep. 1855, p. 98, p. 114 fig. 3. SS. C/12 (Lep.)
Corn worm. (Lep.) *injures* *maize*, & cotton bolls, & known to the planters also as the *Boll worm*.
 { Ag. Rep. 1854, p. 69, fig. 4. *Heliothis armigera*. - 1866, p. 554. Remedies.
Heliothis armigera (Syn. *unobscusa*) *romulea*. - 1874, p. 84. *Corn worm of the north.*
 & cotton boll worm of the southern states. Caterpillars injure *maize*, cotton &c.
 & exceedingly destructive. *Heliothis armigera*. SS. D/2, 2/2. SS. D/2, 2/2. (Lep.)
Corynetes (Col.) more mention Ag. Rep. 1863, p. 97. see also *Neocleria*
Corynetes (Neocleria) *nulipes* (Col.) feeds in Cheese Ag. Rep. 1866, p. 97, fig. 143. *Corynetes* SS. XII/23 (Col.)
Cassus (Lep.) Larva used as food for mankind. Ag. Rep. 1866, p. 38. (Lep.)
Colaspis (Anoda) *lanigera* (Col.) mostly *Anoda*, (they some as *Goldsmith's beetle*). I. eats roots
 { & I feeds on foliage of Forest & Fruit trees Elm, pear, Poplar, Hackberry, Oak, &c. *Alba*, &c.
 Ag. Rep. (Albia) 1866, p. 315, 349. & 1868, p. 89, fig. 77. *Cotula lanigera* SS. VII/17. (Col.)
Cotinis *Altorkina nitida* (Col.) same bug of the middle states & big eater of Florida. insects
 { feed on the sweet sap of maple beech & other trees also eat into ripe fruits figs &c.
 Ag. Rep. 1868, p. 94 fig. 82. *Altorkina*. SS. VII/14. (Col.)
Cotton, caterpillar, or Army worm. Lep. see *Anomis xyloana*, or later, *Aletia argyrella*, &c.
 { *Ans* injures foliage & of Cotton. *Aletia argyrella* SS. XXIV/4. IX/18. (Lep.)
Cotton, arctic, of D. J. B. Lep. is closely allied to *Arctia lator* Ag. Rep. 1855, p. 84, fig. 2, p. VII
 { eats foliage of Cotton plants.
Cotton, blight. a disease of Cotton in certain lands in Mississippi, affecting the whole plant
 { by injuring the centre portion of the stalk caused probably by the root-feeding of
 { *but* cold, wet subsoil. Ag. Rep. 1857, p. 125, with figures.
Cotton, description of varieties. Indian, &c. Ag. Rep. 1856, p. 255, 286, 296, &c.
Cotton, insects Ag. Rep. 1856, p. 39. - 1855, p. 64 to 115.
Cotton, louse. (Hom.) see *Aphis gossypii*. suck sap of plants. Ag. Rep. 1855, p. 8, p. VI, fig. 2. SS. IV/15 (Hom.)
Cotton, stainer or Red bug (Het.) see *pyralicoris* (*Dysdercus*) *sutinelus* (cotton stainer) stains
 { cotton, when ripe on the boll, or as to damage its sale or manufacture, Ag. Rep. 1853, p. 272
 { 1875, p. 124, fig. 29. *Dysdercus sutinelus*. SS. I/11 (Het.)
Cotton by free labor. by M. L. Danclon, Heona, Miss. - wood cut of cotton caterpillar taken from flower
 { Report but entirely wrong as it represents a true *Geometra* figured in 'Rep. 1864, p. 90.
Coupe bourgeois French local name for *Rhyssalus betulae*. Ag. Rep. 1865, p. 59. (Col.)
Cranberry, insects injurious to the same, & sent. by Wm. Fish. Ag. Rep. 1869, p. 207.
 " (Col.) found injuring the fruit. Ag. Rep. 1870, p. 56, fig. 51. (caterpillar only fig.) (Col.)
 " culture. by Joseph J. White. Insects Remedies. Ag. Rep. 1870, p. 526.
 " fly or gnat. (Dipt.) *Acidomyia* injures the minute under leaves at the cut of long. Ag. Rep. 1869, p. 207.
 " stem fly. *Psittophora identidom*. injures foliage. Ag. Rep. 1869, p. 207.
 " leaf hopper. *Chalcidoptera proteus* injures vines somewhat Ag. Rep. 1869, p. 207. SS. IV/4 (Hom.)
 " weevil. *Anthonomus salicis* (Col.) injures blossoms & buds. Ag. Rep. 1870, p. 207. (Col.)
 " worm or caterpillar injures plants.
 " fire worm, or Cranberry worm. Lep. *Anchylopera vocuicaria* Ag. Rep. 1869, p. 207.
 { as fire worm. - 1870, p. 85 fig. 50. SS. C/1. (Lep.)
Crane fly. (Euv) (Dipt.) see *Tipula albivitta*. feeds on roots of grass &c. SS. Lar VII/10. Ins X/27. (Dipt.)
Cratichneumon. *brunneus* (Lep.) hab. *Melanolus communis*. Ag. Rep. (Rathron) 1861, p. 600.
 { fig. 52. 60. *Melanolus communis*. SS. X/4. SS. X/over.

- Craw fish, or Cragy fish (Piscus) destroys young cotton plants in Mississippi. Ag. Rep. 1867, p. 61. Argem.
Cucurbitaria villosus (Col.) feeds on cotton. Ag. Rep. 1868, p. 62, fig. 26. §§ XXIX/5. (Col.)
Crepidodora pubescens (Col.) Flea beetle, or Cucumber flea beetle. (*Psylliodes* syn. very injurious
 to young plants, by eating holes in leaves. Ag. Rep. 1868, p. 37. remedies? see
§§ XXIV/2. (Col.)
 Cricket. black. field. see *Gryllus* (*Acheta*) *rubiginosa*. Ag. Rep. Rathvon. 1866, p. 350, fig. 15.
§§ VII/7. (Orth.)
 Cricket. house or domestic (Orth.) Ag. Rep. 1874, p. 122, fig. 15. habits remedies. see Gryllus (*Acheta*)
domesticus. §§ VII/14. (Orth.)
 Cricket. striped (Orth.) It feeds on vegetable substances & frequent plants. see Peromyscus
vittatus. §§ VII/9, 10. (Orth.) see also Acheta syn.
 " climbing tree, or habit climbing tree cricket. (Orth.) Ag. Rep. 1862. (Rathvon) p. 351, fig. 17, 15.
 " females injure fruit trees, by piercing branches small limbs, & depositing eggs in the
 punctures. peach, &c. see Planthius rupeus — 1868, p. 163, fig. 16 §§ IV/1, 2. (Orth.)
 Cricket. wingless or blind (Orth.) *Anelasma somites*, swarms in certain West India Islands. It is
 said to destroy the locusts, or harvest fly, feeds also on vegetable substances. It is
 eaten also by the Indians. Ag. Rep. 1874, p. 79, fig. 13. — 1874, p. 161, fig. 14.
§§ XIV/5. (Orth.)
 Crickets. (Orth.) Ag. Rep. (Rathvon) 1862 p. 372 eat both vegetable & animal matter vegetables &
 dead small insects &c. — Peromyscus 1864 p. 546. see *Gryllus* *Acheta* &c. (Orth.)
 Cricket. carried off by *Larada argentata*, (Syn. §§ 716. & VI/29.)
 Cicadellidae. (Col.) Ag. Rep. 1863 p. 275.
 Cicocoris. (Col.) insect imported from Europe, feeds on Asparagus, &c. &c. that
 5000 damage was done by these insects in a single County alone in some States, in
 one year. (Nat. Europe. & W.S.) Asparagus beetle. Ag. Rep. 1863, p. 573. remedies? see 1874
 p. 130, p. 573. §§ XXX/7. (Col.)
 Cicocoris. (Stoma) introduced by the destruction of the foliage of the potato (Ag. Rep. 1863 p. 576. see Stoma
§§ XXVII/10. (Col.)
 Cistinus bug. (Orth.) see *Ecotia germanica*. Ag. Rep. 1870 p. 177. remedies, abundant principally in houses,
 supplied by hot water pipes. they eat indiscriminately animal & vegetable substances. boots,
 clothing, paper, leather &c. &c. sometimes called the "small cockroach" Ag. Rep. 1874
 p. 132, fig. 8. §§ 1/2 (Stoma) *Blattis germanica* Syn.
 Cryptophagidae. (Col.) feed on fungi, under bark of trees. Ag. Rep. 1868, p. 84, m. m. examples.
Cryptophagus humeratus. §§ XXVI/38. (Col.)
 Cryptus. inquilitor. (Hym.) an Ichneumon fly, destroying *Styrodia*, *ethemera*, forms (*Chalcus*
construm) the hang, trap, or basket worm. (Syn.) §§ XII/1, 2. §§ XII/3. (Hym.)
 (Tenix) *nidularis* (apinis) 8 sp. door Spider specimen from So. Car. habits Nat. Hist. &c. Ag. Rep.
 1873, p. 162, fig. 9.
 Cucujidae (Col.) mere mention Ag. Rep. 1862, p. 84. (Col.)
 Cucur or Cucurys (Col.) fine fly of the West Indies, see *Pyrophorus notatus*. It feeds on sugar
 cane Ag. Rep. 1868, p. 92. — 1873 p. 154. (Col.)
 " In species of fine fly found in Florida. see *Pyrophorus physodes*. Ag. Rep. 1873, p. 153, fig. 8.
§§ XIV/21. (Col.)
 Cucurys? (Syn. Col.) Rathvon (Error) see *Callidium bayanus*. Ag. Rep. 1861, p. 616. food. Oak, & other wood
 " It said to have been imported from Europe, & recorded by Henry Deffence, to have "emerged"
 from an old raft, &c. to have eaten their way through shal. lead, or zinc "the moths"
 being afterwards found in their stomachs" see *Styctopneustes bayanus*, §§ XXV/3. (Col.)
 Cucurys, testaceus Col. m. m. in grain Ag. Rep. 1869, p. 332. Col.
 Cucurys. (see *Lamophloeus modestus*, found injuring hemp seed. Ag. Rep. 1868, p. 84. fig. 43. (Col.)
Cucurys modestus. §§ VI/32. (Col.)

- Cucumber flea beetle* (Col) eats holes in young plants of cucumbers, *Solms Cucurbitaceae*? *Halictia*
 { for *Crepidodonta fuscescens* (Syn) see *Eubius cucumeris*. *IS* XIV/2. (Col)
- Cucumber moth*. see *Thalettara nitidula* (Lep.) injures Melon, squash, cucumber, fruit by boring holes
 in them. Feeding on the inside. Said by Guent. to injure Potatoes. *Ag. Rep.* 1870, p. 64, fig 47.
IS XIII/6. (Lep.)
- Cucumber striped beetle* (Col) *Diabrotica vittata*, *Synizes* Cucumber, melon, squash plants. I saw one
 { stems. *Ag. Rep.* 1870 p. 74 *IS* XIV/3. (Col.)
- Culex*. Mosquito (Lep.) *Ag. Rep.* 1868 p. 276. (Lep.)
- Culex, ciliatus* " " *L. live* in water & are commonly as *Pelagius*' history & remedies *Ag. Rep.* 1872
 { p. 125. fig 9. *IS* I/122. (Lep.)
- Culicidae*. *Ag. Rep.* 1868 p. 317.
- Cybes concolor* (Linn.) (Col). I found under bark. frequents old frame houses. *Ag. Rep.* 1868 p. 172, fig 143.
IS XIII/13. (Col.)
- Cybididae* (Col) *Ag. Rep.* p. 388. more mention. (Col)
- Cyrculio*. { on plum weevil (Col) *Ag. Rep.* 1861 p. 303. (Col). See also *Conotrachelus*. *Rhynchonatus* &
 { see *Conotrachelus nemoralis* for habits history remedies & *IS* XIV/5. (Col.)
- Cyrculio*. catcher, (new) machine for catching *Cyrculio*. *Ag. Rep.* 1872 p. 151. invented by F. Hull. (Col) Invent 18720.
- Cyrculio*. { *Thousands* methods of exterminating. by pieces of bark laid on the ground under which they
 { creep at night, in spring. *Ag. Rep.* 1873 p. 43. (Col)
- Cyrculionidae*. (Col) (Rathvon) *Ag. Rep.* 1861 p. 603. 1865, 89 — 1868 p. 305. (Col)
- Current borer* (Lep.) L. bores in pith of stalks & shoots, of currant bushes. *Ulyginia Trochilum*
 { typical form. Remedies. *Ag. Rep.* 1866 p. 530. — 1866, & 61. *Ag. Rep.* *IS* XLIII/1. (Lep.)
- Current worm*. or saw fly. (imported) L. destroys the whigs. see *Nematus ventricosus* (Hym)
 { *Ag. Rep.* 1870 p. 77. fig 33.
- Current worm*. or saw fly. (native) (also Gooseberry saw fly) *Ag. Rep.* 1870 p. 77. (Hym). habits.
 { remedies &c. See *Psittophora grossulariana*
- Current*. or Gooseberry caterpillar. or moth (Lep.) L. eats foliage. see *Ellopius (Abnaxia) ribourae*.
 { *IS* XIV/14. *IS* LIII/5. *IS* LXIII/24. *IS* L. *Ellopius*. (Lep.)
- Cursonia*. Orth. Runners. *Cockroaches* & *Ag. Rep.* 1874 p. 130. 131. (Orth)
- Cut worms*. - Larvae or caterpillars of the *Agrotidae*, so called from their habit of cutting
 { off young vegetables. & dragging them to their holes or hiding places to devour.
 { during the night, or in cloudy weather. on Cotton. *Ag. Rep.* 1855 p. 69. fig 1. -
 { 1858 p. 279. - 1864 p. 553. remedies *IS* Examples *IS* XCIX/11. *IS* LIII/8. *IS* LVI/13. &c.
- " " { of onion. see *Agrotis*.
- Cyrtene rubicula* (Col) Locust borer. see also syn. *Cyrtus pictus*. *C. flexuosus*. *Arrhopalus pictus*
 { *C. rubicula* & L. injures wood of Locust. as *Cyrtene*. *IS* XLIII/25.
- Cymatocera* (Villus) und. late. (Col.) hibernates under bark of trees. *Ag. Rep.* 1868 p. 97. fig 133.
 { *IS* XI/20. *IS* XIV/44. (Col.)
- Cynipidae*. (Hym) *Ag. Rep.* 1863 p. 276. (Hym.)
- Cynips pascuorum*. or fig wasp. (Hym.) and fertilizes the fig in Europe. *Ag. Rep.* 1859 p. 332. (Hym)
- Cynips quercus calicis* (Hym) on Oak. Valencia, Europe. The cups & worms used for weaving. (Hym)
 { *Ag. Rep.* 1853. Liv.
- Cynips scipiorum*. I make common commercial oil nuts used for making salt. & *Ag. Rep.*
 { 1855 p. 112
- Cynips quercus calicis*. (Hym) *Diplolepis gervae* Linnaeus. (Hym) which produces the *classe gales*
 { of commerce. feeds on the Oak, & is used for dyeing. *Ag. Rep.* 1866 p. 35. (Hym)
- Cynips*. { their winged flies are parasite on the true gall making cynips. or gall insects
 { & live also in the gall. *Ag. Rep.* 1866 p. 42. (Hym)
- Cynips*. galls on Oaks. see & *Ag. Rep.* 1866 p. 547. (Hym)
- Cyphura glauca*. see *Ptilodactyla* (Col) just probably on Oak. *Ag. Rep.* 1868 p. 94. fig 112.
 { fig. 120 *Ptilodactyla glauca*. *IS* XXXI/29. (Col) Glover.

Cyphon, pallidus, (Col.) Europe. hibernates in the stems of reeds Ag Rep. 1868, p. 95. (Col.)
Cyphon. (Col.) Ind. frequents flowers. Ag. Rep. 1868, p. 95.
Cyrtocanthacris (Orth.) see *icridium americanum*, (Orth.) IS. 1/15 (Orth.)
Cyrtophylus cneaeus, (Orth.) Halydids. feeds on foliage of trees. Ag. Rep. 1874, p. 141, fig. 126. (Orth.)

IS. IV/15.

Dactylophaoera vitifoliae (Hom) a gall louse forming a gall the size of a small pea on the
 { under side of grape leaves. Ag. Rep. 1867, p. 72. — Shimer. 1870, p. 87, fig. 56.
 { gall. IS. plate 10, fig. 26 see in Diptera. *Dactylophaoera* see *Pimpligius belluloides*
IS. 10/19 26 (Hom)

Laddy long legs of Europe, Ag. Rep. 1872, p. 128 is *Tyrula cloracea*. Dip. IS. X/27. L. p.

" " of U.S. is *Phalangium a spider*

Darning needles. Devils. New. Ichneumonidae, or dragon flies. Ag. Rep. 1862, p. 545. New. Ex. IS. 1/11/10.
 { predaceous. feed on other insects.

Dasyllidae. (Col.) frequent plants usually near water. Ag. Rep. 1868, p. 94. (Col.)

Dasygogon (Dip.) predaceous feeds on other insects. Ag. Rep. 1866, p. 44. Ex. *Ladiscolor* IS. 11/21 (Dip.)

Dasyus (Col.) see also *Odontomyx*. Ag. Rep. 1868, p. 94, fig. 118. Ex. *Odontomyx frontalis* IS. XX/17 (Col.)

Dasytes (Col.) Europe injures raspberries. Ag. Rep. 1868, p. 94. (Col.)

Dasytes flexipes (Col.) Europe. said to destroy *Boschnichidae*? Ag. Rep. 1865, p. 91. (Col.)

" niger (Col.) Europe. cuts off blossoms of raspberry. Ag. Rep. 1868, p. 114. (Col.)

Day fly (New) see *Ephemera*. ex. *Palingenia limbata*. exceeding abundant in Washington
 { DC. & sometimes called May fly. IS. 1/15. New. (May fly Syn)

Death watch. (Col.) see *Anobium tabulatum* & *striatum* Ag. Rep. 1868, p. 99. (Col.)

Decortication, recommended for the destruction of wood boring insects. by Mr Eugene Rabents.
 { Ag. Rep. 1863, p. 92.

Deoprea. *Utchisia bella* (Dip.) or the beautiful Dioprea. I said to feed on Lupines, but found
 { feeding in hole of Crotalaria. or rattle box. on the seeds. Ag. Rep. 1867, p. 72.
 { IS. 1878, p. 60, fig. 41. *Utchisia bella*. IS. LI, 32. XXXVI/5 (Dip.)

Delphax arvensis (Hom) Ag. Rep. 1876. no fig. (Hom)

Delphax carinata (Hom) Ag. Rep. 1876, fig. 6. found on grass & frequents young juniper (Wheeler)

{ *Delphax tricornatus*. IS. 11/23 3. (Hom)

Immovable French name for the Dragon fly. Ichneumonidae. (New) Ag. Rep. 1866, p. 40. (New)

Ichneumonidae. *concoloratus* (Col) *Pyrochroa rondoni* Ag. Rep. 1868, p. 101. Ichneumonidae. IS. XXXVI/4. (Col)

Ichneumonidae (Col) destroy specimens of nat Hist. skin's bones. from feathers look almost all enormous
 { remain & are exceedingly destructive in museums of nat hist. (Col) Ag. Rep. 1868, p. 54 (Col)
 { 1861, p. 596. (Col)

Ichneumonidae, *caninus* (Col) see *C. caninus*, destructive to animal substances. IS. 1/17 (Col)

Ichneumonidae, *caninus* (Col) Bacon Beetle. Col. Ag. Rep. 1856, p. 29. Ag. Rep. 1868, p. 395.

{ Ag. 22 23 24 destroys Books pelting meat inside horns kelp. Col. nat hist. almost all insects
 { 1863, p. 569. — Bacon. June. 75 — 1868, p. 54 fig. 49. IS. 1/27. See A/23.

Ichneumonidae, *maculatus*. syn. *pulveris*. see below

Ichneumonidae, *maculatus*. (Col) injures skins coat cell of nat Hist. Ent. & see *Ichneumonidae*

" *maculatus*. IS. XXXIV/14 (Col.) (Ag. Rep. 1868, p. 47, fig. 48)

Ichneumonidae (Col) *Rathum* Ag. Rep. 1861, p. 613. more mentioned. (Col)

Dorodontidae (Col) frequent fungus. under bark. Ag. Rep. 1866, p. 84. m. m. ex. *Dorodontes maculatus*.
 { IS. XXXII/12. IV/1.

Dermia, *maculatus* (Dip) Lar injure foliage of the grape. Ag. Rep. 1854, p. 78, pl. 6. IS. XIV/4 (Dip.)

Dermocerus cyanus. *pallidus* (Dip) *Rathum*. 1861 Ag. Rep. p. 628. fig. 55. L. in Eldon. Toros in putres.

{ *D. pallidus*. IS. XX/1 3. (Col.)

Devils horse see *Prionoxystus cristatus*. Ag. Rep. 1875, fig. 41. destroys other insects. (See also *Reduncus*

{ *novenarius*. *Prionoxystus cristatus* III/14 (Holt)

Devils darning needles. see *Ichneumonidae* & *Agrocin*. *civilis* IS. 11/12 (New)

IS. lower

x *Diatraea haudcompuncta* see *Paleocera* Col. Dep. Ag. 1854, p. 60. 1868, p. 90 in viii fig. 1 *Diatraea*

IS. XXV/24 (Col)

Diabrotica (Haltica) vittata (Col) Striped cucumber beetle. Remedies. Ag Rep 1863, p. 577. C^o
 { I bark of cucumber, &c & frequently hollow out lower part of stem. I feeds on foliage of
 Cucumber. Melon Squash & destroy blossoms of Pear, cherry &c — habits & remedies Ag. Rep
 1870, p. 74, fig 28. on Squash & Pumpkins. — remedy after frost leave some fruits to collect
 the insects & then destroy them. Diabrotica. IS. IX/30. Ins XXIV/3.

Daphneromera (Syn. *Spectrum* & *Phasma*) *emarginata* (Orth) feed on buds, shoots & foliage of Sassafras.
 { & of various trees & shrubs. Ag. Rep 1874, p. 135, fig 6. Insects resemble twigs, —
Daphneromera. IS. IX/10 (Orth).

Diapria agromyzae. (Hym) destroys *Agromyza trilici*, a fly injuring wheat Ag Rep. 1872, p. 134. (Hym)

Nicaeus dilatatus (Col) (Rathvon) Ag. Rep. 1861, p. 593, fig 10. IS. XLIV/23 (Col)

Dicerca (Stenurus) *divinaria* (Col) (Rathvon) Ag. Rep. 1861, p. 60, fig 86. I eat wood of Apple.

{ Beech, Cherry, Peach, Plum, wild & Cult? &c — 1868, p. 91, fig 91. & 1870, p. 67, fig 6. — remedy —
Dicerca. IS. XI/3 (Col)

Dicerca lundae (Col) I eat wood of Hickory. Ag. Rep. 1868, p. 91. IS. XI/11 (Col)

Dicerca punctulata (Col) I eat wood of pitch pine. Ag. Rep. 1868, p. 91. IS. XI/17 (Col)

Dichelomycha hexagona, *longatula* (Col) I feeds on foliage of huckle. Ag. Rep. 1868, p. 87.
 { see D. linearia. IS. IX/13 (Col)

Dichelomycha linearia see above. (prob linear fork claw?)

Dichelomycha subvittata (linear fork claw?) Ins. feeds on foliage of huckle. Ag. Rep. 1868, p. 87 (Col)

Diedrocephala (*Stegionia*) *quadrivittata* (Hom) frequents Blackberry Ag. Rep. 1876, fig 34
 { see *Diedrocephala coccinea* IS. I 53/41/27 (Hom)

Dineutes (*Tenebris*) *americanus* (Col) swims, or creeps on the surface of the water. Feeds on dead
 insects (sometimes called Rose water bug from its smell). Dineutes. IS. III/11 (Col)

Diplodus lundus (*Enagonus viridis*) (Hem) said to destroy the plum weevil, or Curculio

{ *Conotrachelus nemophilus* and other insects. Ag. Rep. 1875, p. 181, fig 50. —
Diplodus lundus. IS. IX/19 (Hem)

Dipholepis gatta tenebraria (Hym) (East Asia) see also *Cynips quercus-bellae*. Ag. Rep. 1866, p. 35.
 { produces the "Alpho galls" used in dyeing, &c (Hym)

Diplosis (Error) *Cecidomyia destructor*. Ag. Rep. 1872, p. 125, fig 10. IS. I 82. IS. IV/4

Diplosis tritici, error in Rep as *destructor*. Ag. Rep. 1872, p. 126, fig 11. IS. I 10/11 (Dip)

Diplosis (*Cecidomyia*) *tritici* (Dip) Wheat midge. Red weevil. injures grain of wheat, barley.
 { Rye, Grass, &c Ag. Rep. 1866, p. 562. remedies. See also under *Cecidomyia*. — 1866, p. 62.
 Wheat midge destroyed by *Sachymorus calceator* Hym — 1866, p. 45 destroyed by
 Thrrips (Orth) — 1867, p. 71 destroyed by *Mormidea typhaceae*. (Hem)

1872, p. 126, fig 11. Error in Rep as *Cecidomyia destructor*. *Diplosis tritici* IS. I 10/11 (Dip)

Diplosis (*Cecidomyia*) *tritici* (Dip) Wheat midge. Red weevil. injures grain of wheat, barley. Remedies. Parasites

{ Thrrips (Orth) — *Coccinella* (Col) — *Callimene*, *Macroglossus*, *Platygasler* (Hym) &

Forficula (Orth) Ag. Rep. 1872, p. 126, fig 11. Localities injured. 1874, p. 129. — Eggs

destroyed by Thrips. 1874, p. 145. See also *Cecidomyia*

Diplosis tritici. IS. I 10/11 (Dip)

Diplosis (*Microctonus*) *sordida* (Col) I eat foliage of Forest & Fruit trees. Ag. Rep. 1868, p. 87.
 { fig 66. *Diplosis*. IS. IX/3 (Col)

Diptera. Remedies Ag. Rep. 1864, p. 561.

" predaceous. " 1866, p. 44

" notes on. Remedies &c Ag. Rep. 1868, p. 274 — 1868, p. 316 — 1872, p. 123, 124. Remedies

Bitoma onenata (Col) Europe. said to destroy *Botrychus*, *Scolytus*, &c Ag. Rep. 1865, p. 91. (Col)

Dodge, J.R. Birds, & Bird laws. Ag. Rep. 1864, p. 181.

Dodge, C.R. "Entomology for Farmers sons," or "How to collect and preserve insects," with figures
 Ag. Rep. 1868, p. 305

Dorcaschemus Wildii (Col) (Rathvon) Ag. Rep. 1861, p. 614, fig 70. I feed on wood of Mulberry. IS. IX/14 (Col)

Dichelomycha albicollis, (Col) white necked pine beetle. I feed on Col. of White pine. Ag. Rep. 1868, p. 87.
IS. IX/3 (Col)

Loricatomia similis (Col) see *Canocara*. Ag Rep. 1868, p. 98. SS XXXVII/8. (Col)

Larv. beetles. see *Melolontha*, *Tachinostoma*, &c. (Col)

Doryphora, *Chrysomela* (*Polysphina*) *decimlineata*. Ten lined sparrowman, western or Colorado potato beetle, or leaf. Ag. Rep. 1868, p. 573. — remedies. — 1866, p. 54. on m. — 1866 p. 27. remedy. — 1867, p. 63. Full article and figures, & it is destroyed by *Melyras cinctus*, *Lebia grandis*, &c. — 1868 p. 79, fig 6. destroyed by *Lebia grandis* (Col) — 1868 p. 434. 501. experiments for destroying with Paris green, &c. — 1869, p. 536. mere mention, 1870 p. 65. destroyed by larva of *Tetracha virginica* (Col) — 1870 p. 75. L feeds on foliage of *Potato*, *Tomato*, egg plants. Home nettle. Jamstown and ground cherry. Long article. poisoning with Paris green recommended. — 1871, p. 74 fig 4. Origin history, habits, remedies, &c. Insect enemies destroying it. plant bugs. *Anna*, *Harpactor* & (Holt) *Lebia* & *coccinellus* (Col) & a *Tachina* (Dip.) — 1872, p. 120. Localities injured, 1873, p. 154. Lost abundance in Washington. &c. & eggs destroyed by a *Coccinella*. 1874, p. 123, fig. 1. habits, remedies, localities, & parasites, destroying it *Hippodamia convergens*, *maculata*, & *quinque notata*, *Coccinella murda*, & *novem notata*. *Tetracha virginica*, *Calosoma calidum*, *Harpalus caliginosus*, *Passymachus cingaris*, *Lebia grandis*, (all *Coleoptera*) *Anna spinosa*, & *grandis*. *Melyras* (*Harpactor*) *cinctus* *Euschistus*, *punctatus*, *Sticticus*, *Embricatus*, (*Heteroptera*) — *Tachina* *doryphorae*. — *Dipthera*. — *Colletes caliginosus* (*Hymenoptera*) — *Epicauta pennsylvanica* and *macrobasis*, *Fabricii* (Col) — 1875 destroyed by *Sticticus fimbriatus* *podisus cynicus*, *Melyras cinctus*, &c. (Col) *Chrysomela decimlineata*, SS XXIX/32 (Col)

Doryphora? (Col) destroying potatoe, in Cal. 1873, p. 154.

Doryphora, *intermedia*, between *D. decimlineata*, & *D. puncta*. Ag Rep. 1874 p. 123, fig 2. SS XXIX/33 (Col)

Doryphora *puncta* *Chrysomela Polysphina* (Col) Ag Rep. 1867, p. 63. fig 6. feeds on Home nettle. *Solanum carolinense*, *peruviana*, & egg plants, — 1870, p. 76, fig 30. — 1871, p. 74, fig 5. as the false Colorado potato beetle, feeds on *Solanum tomentosum*, injures the potatoe, somewhat & eats egg plants: — 1873, p. 153. Larva, described, — 1874, p. 123, fig 2. *Chrysomela puncta*. SS XXIX/34 (Col)

Dorthesia cataphracta (Horn) Ag Rep. 1870, p. 10. SS III/26 (Horn) & Europe Dragon fly. Demisell (France), being among nettle (Horn). *Libellula* *Agrion* &c. L.P.S. prey upon other insects living in or frequenting weirs.

Drepanaria ontariensis. (*herachium* Sp.; Lep.) L. destroy the saw of parash ceiling & other lumbering wood. *Thomodes* &c. Ag Rep. 1864 p. 556. SS XII/11 (Lep.)

Drilus flavescens, (Col) Ex. destroy slugs & snails, Ag Rep. 1864 p. 91. (Col)

Drops worms. see *Orcticus* or *Orcticus uniguttatus* (Lep.) see *Dryocampa* *ephermeriformis*. SS XII/1 to 5 (Lep.)

Dryocampa imparialis. (Cades.) Lep. Great plane tree or interior moth. 600, 61. Oak Rose & (32 Cades)

Dryocampa Anisota senatoriensis Lep. L. feed on foliage of oak. Ag Rep. 1870 p. 83, fig 43.

(It is destroyed by *Scenecum* this Hym. Ag Rep. 1866 p. 15. *Anisota senatoriensis*. SS Lar vi/5, 6. In LXXIII/15. 18. (Lep.) (See also 1869, p. 536)

Dung beetles. see *Cepus*, *Phanocara*, &c. Col.

Dyeing materials from *Dryocampa sutinellus*, article by Dr Jackson. Boston, see *Drepanaria* *sutinellus* Ag Rep. 1858 p. 272

Dynastes tenebrus (Col) L. found feeding on the wood of Cherry, Willow, & ash. Ag Rep. 1868, 1869, fig 80. SS L.D/31 Ins. VIII/16 (Col) (one of our largest native beetles):

Dynastidae (Col) L. in decaying wood. beetles with saw-like horns on head or thorax. Gen. found in artificial model. Ag Rep. 1866, p. 47. 48. 11. (Col)

Dysdercus sutinellus. (*Dysdercus* Sp.) (Holt) Bitten stems, or old logs. L.P.S. stems, fibre of cotton, when in the opening ball. Ag Rep. 1858, p. 271. 1875, p. 124, fig 29, *Dysdercus*. SS 1/11 (1867) see also article on *Dysdercus* material. Ag Rep. 1858 p. 272.

Dytiscus fusciventris, (Col.) (Rathson) Ag. Rep. 1861, p. 543, fig. 11, 12. Aquatic, & carnivorous, feeding on worms, & insects. JS. III/26. (Col.)

Dytiscus hybridus, (Col.) food & habits same as *D. fusciventris*, but mentioned here, as having been taken on the roof of a four story building. Ag. Rep. 1863. - 80, fig. 14. see *Strophoderus* JS. III/2. (Col.)

Eacles, (*Archimedes*) *imperialis*, (Lep.) Imperial moth, or Great plane tree moth. It feeds on foliage of Ash, plane, pine, sweet gum, &c. &c. & are destroyed by the larva of - *Tachinus viridis*, (Dip.) Eacles JS. LCVI/23. 11/7. VII/28. Ins. 1/10. (Lep.)

Enemy of the west. see *Chrysopa vitellus*, (Lep.) so called for attacking houses principally about the corn or hearth. Ag. rep. 1863. p. 276. - 1872, p. 124, fig. 16. JS. XI/13. (Lep.)

Earth worm. see *Lumbricus* ? Japanese Earth worm. see *Megascopus* Ag. Rep. 1871, p. 82.

Earwig see *Spilopopra*, (Rathson) Ag. Rep. 1864. Torriculidae. Tries to catch them & put in nests, of ox-hoof. &c. eggs laid under stones, on the ground. Harassed over like a hen, by the female. &c. - 1864, p. 233 Rathson. preyed upon by a *Cucero* fly, (Hym.) 1864, p. 564. remedies. - 1872, p. 124. Earwig destroys wheat, maize, (*Lophos tritici*) & a *Phoris* preying wheat plants. (see also Torricula. Example - *Torricula* JS. VI/19. (Orth.)

Earwig. see also *Torricula*. Ag. Rep. 1874, p. 131. (Orth.) *Labiata*. 1862, p. 373. *Labiidura*. 1862, p. 373.

Ectobius (*Beutia*) *germanica*, (Orth.) Insects bug, small german cockroach, or vulgarly Roach very destructive, especially in dwellings heated by hot water pipes, destroys *Armas*, & vegetable substances, books, clothing, paper, leather, & has been known even to eat red lead & red water color paints. Ag. Rep. 1870, p. 77. - 1874, p. 132, fig. 3. Ectobius JS. II/14. (Orth.)

Ectomischia, (*Ectomischia*) *cruciatu*, (Hym.) probably carnivorous, & destroys other insects. Ag. Rep. 1875, p. 120. JS. III/14. (Hym.)

Egyptian Bee, (Hym.) see *Apis fasciata*, (Hym.)

Eight spotted Forester (Lep.) *Allypia maculata*. It feeds on foliage of Grape. Ag. Rep. 1874, p. 129. JS. LXXXII/2. c. 11 Ins. XIV/11. (Lep.)

Elaphidion alternatum, (Col.) (Rathson) Ag. Rep. more massive 1861, p. 615, fig. 74. (Col.)

Elaphidion punctum, (Linnaeus) (Col.) Rathson. Ag. Rep. 1861, p. 615. *L. lundis* Duf. trigs. (Col.)

Elaphidion vulturnum, (Col.) Cock-prower. Ag. Rep. 1862, p. 506. *Stenocorus*. 1871, p. 72, fig. 2. *Stenocorus pulchellus* (Fsch.) Syn. *L. lundis* Duf. trigs of *Orth. allypia*, pench. Hickory, chestnut, &c. JS. L. 33/13. Ins. X/13. (Col.)

Elatridae, (Col.) (Rathson) Ag. Rep. 1861, p. 608. It are wood borers. & also feed on roots under the earth. the perfect insects are known by the name of Snapping bug, Skip jacks. &c. & the larvae as wire worms. I. *Somatodes* also called spring beetles. from their habit of springing suddenly in the air when placed on their backs on a level surface. example *Elatr. nigracollis* JS. XI/33. (Col.)

Elatridae. Larvae known as Wire worms. very destructive to roots of plants. (Col.) Ag. Rep. 1863, p. 274 - 1865, p. 89. - 1868, p. 92 - 1873, p. 162 -

Elatr (Col.) Ag. Rep. 1861, p. 606. - 1873, p. 162 mere mention in connexion with *Melanactes* which has probably a luminous larva. *Melanactes*. 1873, p. 163, fig. 10 example of larva *Melanactes moria*. JS. XI/20. (Col.)

Elatr obscurus, (Ew.) (Col.) Insect of an European wire worm. Ag. Rep. 1866, p. 93, 110 &c. (Col.)

Elder, borer, (Col.) see *Desmocerus cyaneus* (*cyaneus*) *kalliatu*, Ag. Rep. 1861, p. 620 JS. XI/13. (Col.)

Ellichmus (*Photinus*) *corruscus*, (Col.) Lightning bug, or fire fly. Ag. Rep. 1865, p. 96, fig. 125. Larvae said to be predaceous. & found in Maryland hibernating under bark of trees. *Photinus corruscus*. JS. XI/15. (Col.)

Ellichmus (*Photinus*) *pyralis*, (Col.) Larvae feed on Earth worms. Ag. Rep. 1868, p. 93, fig. 126 *Photinus*. JS. L. C/33. Ins. XI/16. (Col.)

- Eilepna*. { *Abraxas* ribana. (Lep.) Goodberry, Span. worm, or Currant worm. L. et, caterpillar of Goodberry, and Currant. *Eilepna* L. Cuv. 19, J. L. 11/5. LXVII/22 (Lep.)
- Elm tree beetle. *Salicicula calmarensis* (Germ.) (Germ.) *xanthomelaena* L. feed on the leaves of the Elm, eating the inner substance, the leaf, leaving the midrib & veins untouched, causing the tree to assume a brown & burnt up appearance. Ag. Rep. 1863, p. 578.
- 4 1870 p. 180. remedies. Thaddeus. *Salicicula xanthomelaena*. JG. XXIV/8 XL1/33
- Elongated, fork shaped caterpillar (Lep.) *Salicicula elongata* Germ. Ag. Rep. 1863, p. 571, n. 60. JG. IX/13 (Lep.)
- Emmonedea. Say. (Phosphorus locust) Ag. Rep. 1863 p. 102, fig 175. on flowers JG. XXVI/1 (Col.)
- Empusa longipes. (Lep.) probably feed on other insects. Ag. Rep. 1875, p. 131, fig 52. JG. IV/25 (Lep.)
- Emphytus maculatus. (Hym.) Strawberry Saw fly. Ag. Rep. 1876 p. 73. injures foliage. (Hym.)
- Empusa. (Sperandonea.) muscae. a fungoid growth parasitic in flies. Eventually killing them Ag. Rep. 1872 p. 132.
- Enchenopa (Membracis) lineolata. Ag. Rep. 1876. fig 11. frequent. Butterflies. Hoptines & Locusts. JG. 4/22 (Hym.)
- Endecatomini. (Col) mere mention. Ag. Rep. 1863, p. 99. (Col)
- Endecatomus rugosus. (Col) in fungi, found under bark of Helix poplar. Ag. Rep. 1863, p. 94, fig 134. JG. XXXIII/17. (Col)
- Ennomos subsignaria. (Lep.) New York measuring worm. (Lep.) L. feed on foliage of Elm, poplar. Linden &c. Ag. Rep. 1864 p. 554. remedies &c. JG. XXVIII/6. (Lep.)
- Enoplon thoracicum. Say. Orthoptera damicornis. (Col) L. feed in wood. Md. Ag. Rep. 1863, p. 7, fig 162. Orthoptera damicornis. JG. XII/26. (Col)
- Entilia. (Membracis) fasciata. (Hom) frequents woods. Ag. Rep. 1876, p. 13. Entilia JG. I/1 (Hom)
- Entilia (Membracis) carinata (Hom) frequents the Potato plant. Ag. Rep. 1876 fig 14. Entilia JG. I/24 (Hom)
- Entomological Reports. Uhler. Ag. Rep. 1860 p. 312.
- " " Rathun. Lancaster, Pa. part 1. Ag. Rep. 1861 p. 535. — 2^a 1862, p. 571.
- " classification &c. Ag. Rep. 1863. p. 563.
- " Report of Paris Exposition des Insects. Aug. Sep. 1865 p. 88.
- Entomological division, history & museum. Ag. Rep. 1863, p. 10.
- Entomology "practical for farmers sons." by C. Reddodge. Ag. Rep. 1863, p. 345.
- " " in Michigan (Ins. spoken of: Doryphora 10 Anala - Col. longocampa, senilis, cantharidia pomonella, aspidius conchiformis (Holtz) Rep. 1864 p. 536.
- Entomological science. Application of * by Prof. S. S. Smith. Ag. Rep. 1872 p. 448.
- Ephemer. May or May fly. Ag. Rep. 1864 p. 545. Food for fish. L. live in water. Example
- { *Salicicula* (Ephemer) lineolata JG. V/5 (Hym) (very abundant in Washington D. C.)
- Ephialtes. (Hym) L. destroys small wood boring larvae Ag. Rep. 1866 p. 41.
- { JG. 1/20 ♀ VII/13 ♂ (Hym)
- Epicaerus. imbricatus. (Col) injures foliage of Apple & Cherry trees. Ag. Rep. 1870, p. 71. JG. XXXVI/18 (Col)
- Epicaerus. fallax? (probably vadosus var) see Graphorhinus. (Col) eats cabbage, clover, cherry, Apple, Goodberry &c. Ag. Rep. 1863, p. 573. — 1865 p. 40. (Col)
- Epicaerus. Graphorhinus) vadosus. (Col) injures leaves of Cabbage, Clover &c. Ag. Rep. 1870, p. 71, fig 18.
- { *Graphorhinus* JG. XIII/25. Col
- Epicauta. Col. see also Cantharis. L. et. &c.
- Epicauta atrata. pennsylvanica. (Col) Ag. Rep. 1863, p. 103. J. eats flowers of China aster, fol of potatoes. frequents flowers of Golden rod, 1863 p. 107. (Cantharis atrata of Harris) see *Epicauta pennsylvanica*. JG. XXXVII/5. (Col)
- Epicauta cinerea. (Cantharis, marginata of Harris) (Col) food. Clematis. Butterflies &c. Ag. Rep. 1863, p. 103, fig 181. — 1871 p. 107. was butterflies potatoes? & Egg plants. *Epicauta cinerea* JG. XXVIII/6. Col. another cinerea see *Macrobasis unicolor* JG. XXVIII/9. (Col)
- Epicauta cornuta. Col. injures potatoes in Kansas. Ag. Rep. 1870, p. 68, fig 5. JG. XL/45. (Col)
- Epicauta uncinata. Col. injures potatoes, mere mention, 1871, p. 7, fig 7. Ag. Rep. remedy, poisons green Effects, substitutes. JG. XXVII/8 JG. 1870

- Epicaula marginata*, see *E. cinerea*, above. Ag. Rep. 1862, p. 106. -- 1871, 70. -- *IS. XXIV* 12, (C.)
- Epicaula pennsylvanica* (Col.) (*Cantharis atrata* Horn) eats flowers of *Linnaea borealis* Potatoes, frequent flowers of *Soldan* Rod. (*Solidago*). Ag. Rep. 1863, p. 103, fig. 184. *E. pennsylvanica* *IS. XXIV* 15, (C.)
- Epicaula pennsylvanica* *IS. Macrolasius* (Fabricius), unicolor are said to destroy *Empetrum nigrum* and *Epipactis atrorubens*.
- Epicaula lineolata* on the Colorado potato bug or beetle. Ag. Rep. 1874, p. 138. (V.)
- Epicaula strigosa* (Col.) I. injures flowers of the cotton. Ag. Rep. 1865, p. 133, pl. 2, fig. 1. *IS. XXVII* 11, (C.)
- Epicaula Cantharis vittata* (Col.) 1854, p. 62. Ag. Rep. M. M. 1867, p. 64. -- 1871, p. 102. *IS. XXVII* 11, (C.)
- Feeds on Potatoes, vegetables, & flowers. -- 1871, p. 76, fig. 7. injures, pinches, & remedies. *Plants grown*
- Effects, substitutes. *IS. XXVIII* 12, (C.)
- Epilachna borealis* (Col.) spotted squash beetle, or lady bug; I. injures foliage of Squash, & other Cucurbitaceae
- lar. Remedies, habits, &c. Ag. Rep. 1863, p. 579. -- 1865, p. 91. -- 1866, p. 43. is destroyed by a bug (*Stenobothrus S. anchorago* syn. *diana* (Holt) *IS. XI* 22, IV 20, V 25.) *Epilachna* *IS. XXIX* 35, (C.)
- (see also Ag. Rep. 1875, p. 110, fig. 10. for *Stenobothrus* destroying Squash beetle (*Epilachna*) Col.)
- Exochus* / *Exochus* carnivorius, feeds on other insects. Ag. Rep. 1866, p. 44. example *Exochus aestivus* *IS. III* 34, (C.)
- Eriosoma imbricatum* (Hom) Ag. Rep. 1876, fig. 42. frequent leafhopper. *IS. IV* 15, (Hom)
- Eriosoma lanigera*, Apple bright. (Hom) Ag. Rep. 1876, fig. 41. -- 1864, p. 560. see also *Raphis* (syn) woolly
- Eriosoma* *IS. III* 21, (Hom)
- Eriosoma Pemphigus* (Hom) a woolly aphid on the root of Pear. Ag. Rep. 1870, p. 60, fig. 54. (see also *Pemphigus*, page 7) (Hom)
- Eriosoma tessellatum* (Hom), Ag. Rep. 1876, fig. 43. frequent Birch. *IS. III* 19, (Hom)
- Eurhynchus* (Cetonia) *inda* (Col) feeds on sap of Cotton bolls, musc. stalks, & leaves, &c. & injures
- ripe peaches, figs, pumpkins, &c. frequents Golden rod flowers, &c. Ag. Rep. 1862, p. 90, 107. see. *Euryomyia* (Syn. *Euphoria* also) *inda*. *IS. IX* 24, (Col)
- Eurythronura*, *Solligona*? Hom. Leaf hopper, & in cornfields &c. injures grape vine. Ag. Rep. 1854, p. 77, pl. 6. -- 1864, p. 559. remedies, &c. -- is eaten? 1871, p. 100. Grape leaf hopper. (fig. 19)
- habits remedies &c. & destroyed by a true thrips (Hom) & here called *Eurythronura velis* 1874, p. 145. -- 1875, is destroyed by *Camptylomura viticollis* (Holt) (the glassy winged Soldier bug fig. 1875, p. 125, fig. 30) a note as there is much doubt as to what insect is the true *Eurythronura* (*Solligona*) *velis*, many of them appearing to be merely varieties of *Eurythronura basilaris*, we have classed all those feeding on the grape vine leaf under the head of *Eurythronura*.
- Eurythronura basilaris* (Hom) very abundant and destructive to the Grape foliage, in the vicinity of Portland on Washington. D.C. I may prove to be a var. of *Exochus*? *Ebasilaris* -- 1876, p. 33
- IS. II* 5, 35, 35, (Hom) (a new sp. or var. is figured at 1/5, (Hom) p.)
- Euchaeta*, egle. Lep. a moth feeding on the mulberry is destroyed by plant bugs. Lygacae, Tarsacis, & *L. fasciatus* Hcl., *Euchaeta*, *IS. XC* 11, 22, 33, *XLIV* 22, & *LVIII* 14, (Lep.)
- Eucnemidae* (Col) see also *Throedeidae* (Col), Ag. Rep. 1863, p. 92, 112, (Col)
- Eucnemis amaenicornis* (Col.) found on leaves or under bark of trees Ag. Rep. 1863, p. 72, fig. 106
- see *Deltometopus amaenicornis* *IS. XII* 38, (Col)
- Euphorbia* (Hym) (*Aschom*) Ag. Rep. 1862, p. 376. destroy eggs of Cockroaches / Blatellae &c. (Hym)
- Eupotomus* (Asiatana) *ministrata* (Lep.) Handmaid moth, or Yellow necked Apple worm caterpillar cluster together, & when alarmed hold up both ends of body. feed upon mulberry, Apple, Cherry, Oak, &c. &c. Ag. Rep. 1855, p. 339. *Asiatana ministrata*. *IS. XXXIII* 11, (Lep.)
- Eumenes*, *fraterna*. Potter wasp. (Hym) makes a flask like mud nest, on stems or small branches of plants or shrubs, containing one larva, which nest it stores up caterpillars to serve as food for its larva. Ag. Rep. 1866, p. 63. it destroys larvae of *Anisopleris variator*, or Canker worm, *IS. XXVIII* 11, (Lep.) & is itself destroyed by *Diaprophora* *IS. V* 35 (Lep.)
- 1870, p. 78, fig. 55. *Eumenes fraterna* *IS. II* 27, 28, & 1/35 see in *Diaprophora*, " nest
- Euphorbia* (*Euryomyia*) *melancholica* (Col) see *Euryomyia*, *IS. XXXIV* 30, (Col)
- Euphorbia* (*Euryomyia*) *inda*, Col. see *Euryomyia*, *IS. IX* 29, (Col)

- Eupithecia miserulata* Lk., probably the small span worm on clover, &c. Ag. Rep. 1863, p. 335. 46 VII, fig. 3. Ag. XIV 24 21. Ins. LXI/25 & LXXXIII/1683. Found also on the w.
- Euxestolera* (Platypnus) Ag. Rep. 1862, p. 373. Order containing Curculionids, but here placed on Onychophora.
- Eupithecia* *picula* (Argynnis) columbiana (Lep.) L. feeds on the wild passion vine. (see Mayhew)
Found in Cotton fields. Ag. 1/9. LXXXVI/1. (Lep.)
- Euryomyia* (Euphorbia) *Colonia* (Cec.) Ins. frequent flowers of Solilago. (Golden field) &c.
{ it feeds on the exuding sap of cotton bolls when injured. also on sap of Maize Locust &c.
& injures ripe peaches, pumpkins, figs, &c. Ag. Rep. 1868 p. 90. fig. 86. Euryomyia. unda
Ag. IX/39 (Cec.)
- Euryomyia* (Euphorbia) *Colonia* *melancholica* (Cec.) Ag. Rep. 1863, p. 90. Ins. frequent flowers, feeds on sap
{ of diseased or injured cotton bolls. Euryomyia melancholica. Ag. XXXIV/301 (Cec.)
- Eurytoma* (Isosoma) *horti* (Hym.) joint worm of wheat, &c. L. ten the stalk, causing the
{ joints to swell & become brittle & hard. - injures Barley, wheat, Rye, &c. Ag. Rep. 1864, p. 76 p. 5.
- 1866, p. 42. - 1864, p. 4. - & is destroyed by *Phaenocarpa*, or *Stelgaster*. Ag. Rep. 1864, p. 42.
- 1864, p. 567. Isosoma horti. Ag. VI/26. (Hym.)
- Euschistus* (Pentatomæ) *punctatus* (Bert.) gray Plant bug. of L. J. R. Ag. Rep. 1855, p. 93. pl. VII, fig. 6.
{ 1874, p. 123. destroys the larva of the Colorado potato beetle. *Chrysomela* (Doryphora)
lineata. 1875, p. 118, fig. 7. & frequents Thistles & murens. Euschistus. Ag. II/12. (Lep.)
sometimes probably also sucks sap of trees & shrubs.
- Evagorus* *villosus* (Hbst.) Ag. Rep. 1858, p. 266 destroys the Orange Aphis, or plant louse. - 1866, p. 23.
{ also destroys other insects. - 1857, p. 131, fig. 49. Ag. III/18. (Hbst.)
- Evagorus* *viridis* see *Diplopus* (viridis) (Hbst.) said to destroy the Curculionid or plant louse, & other
{ insects. Ag. Rep. 1875, p. 131, fig. 50. Diplopus. viridis. Ag. IX/15. (Hbst.)
- Exochomus* *Guari* (Lac.) (controversial) (notch p. 50) (Cec.) destroys the cocoon, on the orange trees.
{ Ag. Rep. 1868, p. 261. - 1865, p. 91. - 1866, p. 82. (Cec.)
- Faidherbia* (Bombux) *Beachinaria* (Lep. see (Bombux). Ag. Rep. 1865, p. 93. - 1866, p. 38.
{ feeds on plant *Beachinaria. Ag. CXI/11. (Lep.)*
- Fibres*, Textile. &c. Paris exposition of Insects, 1865, p. 95. Ag. Rep. .
" " *Boehmeria nivea*. *Phormium tenax* &c. Ag. Rep. 1866, p. 32. 1866, p. 21.
- Fidea murina* (Col.) I. injures grape foliage Ag. Rep. 1867, p. 71. Ag. XXXVI/28. 29. (Col.)
Fig. cater. see *Allothrips* (Symmetris) *nitida* (Col.) Ag. Rep. 1863, p. 596. - 1868, p. 94, fig. 82.
{ *Allothrips. Ag. VII/19. (Col.)*
- Fire light*, a disease of the pear tree. Ag. Rep. 1863, p. 574.
- Fire fly*. First appearance in the spring. Ag. Rep. 1858, p. 137
- Fire fly* (or Lightning bugs, of the United States. see *Ellechnia* *Collops* *photuris* *lampyrus*
{ &c. Ag. Rep. 1866, p. 95. (Cec.)
- " " of the West Indies. (Col.) see *Pyrophorus noctilucus*. Ag. Rep. 1868, p. 93. (Cec.)
- " " of Florida. (Col.) see *Pyrophorus phylloides*. full account Ag. Rep. 1873, p. 106. pag. 3.
{ Ag. XI/21. (Cec.)
- Fire worm* *Crabberry* (Lep.) I. *Anchylopera vacciniana*. destroy tender shoot, & foliage Ag. Rep.
{ 1871, p. 80. Ag. C/1. (Lep.)
- Flata viridula* (Hom.) frequents Bromides & Grass. see *Amphiscepa viridula. Ag. I/47. (Hom.)*
- Flata* (*Cicada*) *limbata* (Bom.) (China) *Limneclypea* *max* insect. Ag. Rep. 1851, p. 57. (he ca.)
{ It yields a white wax. { *Flata nigricollis* (Hom.) see *limbata* Ag. Rep. 1851, p. 57.
{ (Homoptera).
- Flaw*. *Pulex irritans* (Lep.) bite & suck blood, of mankind, animals, & birds, &c. remedies.
{ 1864, p. 362. Ag. Rep. & see 1874, p. 577. Ag. VII/47. (Lep.)
- Flaw beetles*. *Crepidodera pubescens* &c. (Col.) Ins. eats small holes in young leaves &
{ sometimes totally destroy young plants. see *Epitrix cucumeris. Ag. XXIV/2. (Cec.)*
- Flaw garden* Orth Ag. Rep. 1874, p. 155. see *Podura villosa. Ag. VI/7. (Orth.)*
- Flesh*. *Pier* (Lep.) see *Calliphora*. *Lecilia*. *Sarcophaga* destroy flesh meat. & lay their eggs on young
larvae (*Sarcophaga* *viriparus*) on carrion. putrid bones. &c. Ag. Rep. 1872, p. 132. (Lep.)

Flies are destroyed by wasps, or hornets. Ag. Rep. 1866. p. 62. Ichneumonidae. *Bombus*
Meloe unguiculatus, in their bodies. Ag. Rep. 1868 p. 102. *Meloe* S.D. 222. *Ichneumon* 22. (Co.)
 Fly. The larvae of a species of fly in Mono Lake, is eaten by the *Ichneumon*. Ag. Rep. 1870 p. 102. (Co.)
 Saw. are destroyed by *Bombus*, *Ichneumon*, *Chalcids*, & also by a pair of the growth *Empusa*
 (*Stenomacrus*) *muscae*, Ag. Rep. 1872. p. 132.

fly, or T. poison. *Amianthimum muscae toxicum*, a plant growing in the southern states.
 { It used for poisoning flies. Ag. Rep. 1873, p 131.

Fig. common house fly, *Musca domestica*, is sometimes dangerous to mankind, by conveying
noxious, & infectious diseases, from house to house. Ag Rep. 1872 p. 132. Ill. IV, 33 (Fig.)

Food of Coleoptera, or Beetles. See "Vegetable and animal substances destroyed" by Coleoptera

{Ag. rep. 1868. p. 104. (Col.)

Forest fly, golden eyed, see *Chrysopa. vitatus*. Ag. Rep. 1863 p 276. - 1872 p 129 fig 16. JS. x1/182 in.

Forester, eight spotted See *Allypia octomaculata* (Elep) Feeds on foliage of grafs

{ Sp. Ear Letter Cor number 123/2. Cor 100/11. Ins X 14/1. & 411/6. (Sep).

Confluoscila, gigantea. (Orth) *Euplex. Rethnon.* Ag. Rep. 1862 p. 373. Fig. 1. D. 2 x 2. (Orth)

Toxicaria (Calk.) Rathvon Ag Rep. 1862 p 373. Canz. 1868 p 308. — 1874 p 130. 95 SS. 11/11 NYG (6)

Colts. Earning. Europe, Rabbits, and eat young plants, especially grain by
(eating the roots. grow the crotches of flowers. eat holes in grapes, Peaches & other fruit

but said by some, to be beneficial, by eating the unripe seeds. (*Euphorbia trilobata*)
plant also. Undoubtedly the story. Ag. Rep. 1844/1845, p. 2. *Tonicaria* 1841/42, p. 10.

Torricella nivalis - Europe (Siberia). *Malvastrum* (Lig.) *Malvastrum* (Lig.) 1862, 1872, 1873. - *Malvastrum* (Lig.)

{Flowers, cabbages &c. (Anthr.)

Forficulidae. Ag. Rep. 1862. p. 373. — 1868 p. 308. — 1874. p. 130. (Orth.)

Formica (Hym) See ant.

Tornax, Ac., in old Cat. stamps. Ag. Rep. 1861: 92. examin. *Tornax* (*Dromacodus*) *cylindricollis*.

{ 35. XXXIV / 25. (Col)

Four named Curculio, Col. Anthrenus. quadrigibbus, eats round holes in Apples & plums.

{ Aug. Rept 1870. p 70. fig 14. J.G. XXXVI/44.45 XXXVII/28-29. (Col)

Ficus in garden of acclimation. *Ficus*. Description. Ag. Rep. 1865. p. 95.

Frog spit or froth insects/Hum. Sec. Addressance 95. Ag. Reg. 1864 p. 559. - 18% 7/25 Froth. J.G. W. Hum.

Yulgora subsp. (n.) frequens brandis. Virens, Ag. Rep. 1876. Ag. 4. see Scorria subsp. V.B. 1730. Form.

Junco, *Angin* n. *Ag. Rep.* 1864 p. 529. See also *Amazilia* in
Lab. n. *House* fig (10p) see *Tabanus atratus* stings & torments horses &c *DS* 11/15. *Lx* 3540. *Wp.*

Tachineta americana.⁹ *Col. Rattray, Uq. Rep. 1861, p. 539.* *densus* other insects. (*Lo. fig. 522*) & *Tachineta bicolor*.

{ 39, 4/11, (Col)

Yutorion. dec ¹⁸⁵⁴ ~~1855~~ per relation Col. Ag Rep 1854 p 60 — 1855 p 90. pl viii fig 1 Scats noirs in Coton & other

{ plants. very troublesome in gardens see *Diaprotica* 12 *punctata*. *TG* xxv/94. *Ce*

Galeruca. californiensis Galerucella xanthomelaena. (Col.) Elm tree beetle. Destroy foliage of Elm trees, eating the inner substance of the leaves, leaving the mid ribs & veins untouched causing the whole tree to become scorched or burnt appearing. — recorded 1866. p 578. — full article & fig 1867 p 63. 1876. p 74 /fig 27/ (poor). Galerucella xanthomelaena. Gr. xxiii 5. x lii 13. (Col.)

[Galerucella xanthomelaeana, T.G. XXIII/5. X 41/43. (Col.)

Galruccella xanthomelaena. (Crotch list) see above, under *Parruca*.

Gaigulus oculatus Hal. Ag. Rep 1875, p. 132, fig. 55. Probably destroy other insects, among which

{ Mr Thomas says is Xya Tridactylus terminalis (3.9.iii, 6. Oct.)

Gall making larvae. destroyed by birds. 29. Sep 1894. 125. (Gym) (Birds) (C. V. 2)

Gall gnats, see Cecidomyia, & Hym.

Yellow nats. Ag. Rep. 1855, p. 66. Oak formed by Agnir. used Ag. Rep. 1864, p. 57.

Full insects themselves subject to parasite four winged was Ag Rep 1866 p 22 (Mey)

Gall flies native. (Hym) on Blackberry. Ag. Rep 1866, p 35 (Hym)

Each louse, causing galls like a bag or purse, the size of a small pea on the underside of leaves.

{ Cal. Ag. Rep. 1867. p. 72. ... by 56. see Pentstemon, nitidus d. 1869. on 56. 55. 7. 1869.

- Galleria cerasana* (Lep) Bee or Wax moth. It eat the wax in beehives, & form silken tubs,
 { in the comb, to protect themselves from the bees. remedies, &c. Ag. Rep. 1864, p. 555.
Galleria. IS. VII/4. LXXXVII/7. (Lep)
- Garnasus*, a mite infesting *Nectochorus* (Col) Ag. Rep. 1868, p. 82.
- Garden of Acclimation, Paris. Ag. Rep. 1865, p. 95. Animals. Cattle, goats, sheep, horses, swine, &c.
 { Fowls, &c. &c.
- Garden Plead. see *Smynturus*. & sometimes *Podura*. feed round the holes made in the leaf
 { by *Phyllonela striolata* & other insects, see *Orchestes vitacea*. IS. XXIV/8. Ag. Rep. 1874, p. 145.
Smynturus. IS. VII/7a. (Orth)
- Gasterophilus* (*Gastrius*) equi. Lep. Stomach bot of the horse, history, habits, & remedies. Ag. Rep.
 { 1873, p. 130. Melia arderach or pride of China berries mentioned.
Gasterophilus. IS. L. VII/34. IV/2. VIII/22. (Lep).
- Gastrius*, equi, see *Gasterophilus*, above.
- Setachia*, *ceratella*, see also *Amacampa* & *Butalis*. Angoumois, moth. *Lixurus*, corn. Moths.
 { grain, wheat, &c. Ag. Rep. 1852, p. 67, pl. 4. — 1864, p. 556, for remedy. 1866, p. 23, m. n.
Setachia. IS. XVII/1. (Lep) see also, *Amacampa*.
- Geocossus*. Earth bug. Hct. 1875, p. 116. Bugs living on the land or earth, in contradistinction
 { to the *Hydroscorus*. or bug, frequenting water
- Geometra* or *Geometridae* (Lep) span worms, or *Coopers*, from their mode of progression
 { 1855, p. 90, pl. VIII, fig. 2. & 1868, p. 314. (Lep)
- Georgian leaf eater, see *Phyllophaga georgiana*.
- Georyssidae* (Col), more mention. Ag. Rep. 1868, p. 85. example *Georyssus fusinus*. IS. XX/10 (Col)
- Geotrupes splendidus* (Col) feed excrement, manure, &c. Ag. Rep. 1866, p. 86, fig. 57. IS. XX/10a (Col).
- Geotrupini* Ag. Rep. 1868, p. 86. (Col)
- German Cockroach. Orth see *Ectobius germanica*. (also *Croton* bug of 34.) IS. I/14 (Orth)
- Gerris conformis* (Hct) water skimmer. aquatic in habits & destroys other insects, Ag. Rep. 1874,
 { p. 132, fig. 53. — IS. 4/6. (Hct)
- Gerris lacustris* (Hct) carnivorous, & eats other insects. Ag. Rep. 1876, p. 132, fig. 64. IS. 4/1. (Hct)
- Gerris*, Europe. Egg & Ins destroyed by *Scelus*? (Hym) Ag. Rep. 1873, p. 132. Note
- & Glasswinged, Soldier bug. see *Campylomma uliginosis*, destroys the grubs seen, Ag. Rep. 1873,
 { *Euphyronema ulis*? Ag. Rep. 1873, p. 123, fig. 30. IS. *Campylomma*, VII/8.
- Grass worm, see *Sampyris*. Ag. Rep. 1869, p. 98. (Col)
- Green eyed Forest fly. See *Chrysopa* (Hym) Ag. Rep. 1864, p. 545. ear fly of the work, Ag. Rep.
 { 1872, p. 129, fig. 16, *Chrysopa*. IS. XI/18. (Lep)
- Gold fringe moth, & clover worm. *Asopia costalis*. *Pyraus olearis*, eat clover on stacks or
 { farms, &c. Ag. Rep. 1867, p. 73 — 1870, p. 84, fig. 48. *Asopia costalis*. IS. LXXIII/25-XX/14. &c.
 { see Clover worm. (Lep)
- Golden ground beetle (Col) (Lep) destroys other insects, see *Carabus auratus*. (Col)
- Goldsmith beetle see *Allothia nitida*. (Rafinesq) in Ag. Rep. 1861, p. 601. IS. VIII/9.
- " — " but voracious. see *Cotalpa lanigera*, or the woolly Aceda, Ag. Rep. 1866, p. 87, fig. 71,
 { IS. VIII/19. (Col)
- Gonococcus*. (Anasa) tristes. squash bug is eaten by toads. Ag. 1870, p. 91. injures squashes, remedies
 { 1864, p. 557. *Lixurus* squashes, pumpkins, &c. & it is said to destroy the Colorado potato beetle.
 { 1873, p. 120, fig. 18. — remedy suggested 1871, p. 76 — 1870, p. 87, fig. 60. — 1875, p. 120, fig. 15
Anasa tristes IS. I/14 (Hct)
- + Gooseberry midge. see *Acodomyia (Asphondylia) grossularia*. injures fruit of Gooseberry.
 { Ag. Rep. 1872, p. 127. IS. XI/28. (Lep)
- Gooseberry (or Currant) saw fly, (unidentified) see *Homatus ventricosus* (Hym) remedies. 1864, p. 546.
 { 1870, p. 77, fig. 33. IS. 0. The native currant worm or fly is *Phaenophora grossularia*.
 { Ag. Rep. 1870, p. 77. IS. 0.
- Gooseberry. Spun worms (Lep) *Ellebea (Abraxas) nileana*. It eats the pod of Currant, & gooseberry.
 { IS. L. VIII/14. LXXXVIII/24. (Lep) IS. 1/10

- Gortyna*, *nicta*. (Lep.) Bores into the flesh of chubits, Aster, potato. Tomato. col. of maize.
 { various fruits, usually known as the spindle worm, or stalk borer. Ag. Rep. 1867, p. 64.
 } *IS* & *XCVIII*/24. *CIV*/12. *IXCV*/13. (Lep.)
- Goat. a disease in wheat, & barley (in Europe) consisting of an enlargement, or swelling of the joint. Ag. Rep. 1872, p. 184.
- Grain moth, or wolf. see *Tinea granellor* (Lep.) destroys grain. maize. Cotton bolls. &c. 1856, p. 65, & 4. 1856 (error of *IS* & *TB* as *Heliothis*) 1858, p. 98, p. 17, fig. 3. 1864, p. 556. *IS*. *IX*/1 (Lep.)
- Grain weevil. (Col.) *Sitophilus granarius* (Rathvon) Ag. Rep. 1861, p. 603. It destroys Grain. Wheat. Maize, &c. see. *Calandra remotipunctata*. *IS*. *XXV*/2. (Col.)
- Grape disease in Europe. *Uredo*. *Uredo*. &c. fig. 1853, p. 311, & 1864, p. 311.
- Grape berry moth. (Lep.) see *Penthina ulivorana*. L. calls into the berry, or fruit. Ag. Rep. 1872, p. 86, fig. 32. *IS*. *XCVII*/3. *XCIV*/2. (Lep.)
- Grape root borer. (Lep.) *Algebra* (*Drochilum*) *poliiformis*. (Lep.) L. injures root, & lower part of stem, of grape vines. Ag. Rep. 1862, p. 60, p. 14. — 1867, p. 72, fig. — 1870, p. 72.
IS. *XVII*/5. (Lep.)
- Grape seed curculio, or weevil. (Col.) *Calodes inaequalis*. injures fruit of grape, by eating into it. Ag. Rep. 1867, p. 72. — 1868, p. 83. — 1874, p. 70, fig. 12, see *Megastotes* *IS* & *XXXVI*/42 (Col.)
- Grape vine flea beetle. or Steel blue grape leaf beetle (Col.) injures foliage & buds Ag. Rep. 1863, p. 576. 1870, p. 74, fig. 29. *Graptoidea* *IS* & *XXV*/9 (Col.)
- Grape vine leaf gall disease. (Hom.) see *Temphigus vitifoliae* (*Dasylischiaera*) forms galls the size of a small pea, shaped like an open mouthed bag, or pump on the under side of grape leaves. Ag. Rep. 1867, p. 72. — 1872, p. 57, fig. 56. — 1874, p. 87, fig. 25. (Hom.) *IS*. *X*/26 (see in *Lepid.*)
- Grape leaf hoppers (Hom.) *Erythroneura* (*Tetragonia*) *notata* &c. injure foliage of grape see example *Erythroneura basalis* *IS* *III*/37. (Hom.) (see Ag. Rep. 1874, p. 142)
- Grape process. *Lep. Uroclastus* *Proctus americanus*. It eat the foliage of the grape vine. Ag. Rep. 1854, p. 76, p. 6. 1866, p. 549. — Remedy. 1870, p. 81. *IS*. *XVII*/3. (Lep.)
- Grape root gall disease. *Phylloxera vastatrix*. (Hom.) L.P.D. suck the sap from the roots of grape vines, under the earth, forming knotty swellings on the roots, frequently causing the death of the vine. Ag. Rep. 1870, p. 57, fig. 55. — 1874, p. 88, fig. 22. — 1875, p. 289. — French prize of 2000 francs to be given in 1874 to discover the manner in which it is carried from vine to vine. — 1873, p. 160. — 1874, p. 127, fig. 42, &c. — 1876, fig. 46. see article on *Phylloxera* (Hom.)
- Grape vine saw fly. (Hom.) *Selandria vicia*, remedies. &c. Ag. Rep. 1864, p. 546. *IS*. *IX*/86. (Hym.)
- Graptoidea (*Scutella*) *chrysox*. (Steel blue grape leaf beetle, or grape vine flea beetle. injures foliage & buds of grape. Elm, plum, Black alder &c. Ag. Rep. 1863, p. 576. 1870, p. 74, fig. 29. *Graptoidea* *XXXV*/9. (Col.)
- Grass army worm of the north. *Leucania*, *extranea*, *unipuncta*. L. feeds on grass grain. &c. Ag. Rep. 1870, p. 83, fig. 46. *IS*. *XCVIII*/22. *XXI*/16. *XXV*/7. (Lep.)
- Grass worm or caterpillar (Southern) Lep. in cotton fields where it eats the grass & weeds between the rows of cotton. & resembles *Lophogymna frugiperda* of Smith & Abbott. Ag. Rep. 1855, p. 77 *IS* *VI*/fig. 6. — destroyed by ants. (Hom.) 1866, p. 43. Feared as compared with the Cotton army worm, *Anomis xylinae*, *argyllacea*, 1867, p. 59. see *Lophogymna macra* *IS*. *XXVIII*/5 (Lep.)
- Grasshoppers & in cotton fields, see *Locusta*. *IS*. *TB*. Ag. Rep. 1855, p. 69, p. 77, fig. 3. (Orth.)
- Grasshoppers. Ag. Rep. 1866, p. 87. — seen by Indians, 1870, p. 426. — very destructive in Texas & California, 1838. 1846, 1855. 1828, &c. see article in Ag. Rep. 1874, p. 132. (Orth.)
- Grasshoppers, machine for killing grasshoppers. in Salt Lake city. Ag. Rep. 1871, p. 80.
- Tree tree. (Col.) a worm feeding in palm trees. it is used as food, for mankind & esteemed as a great luxury by the negroes in the west Indies. Ag. Rep. 1866, p. 38. Larva of *Calandra palmarum*. (Rathvon) Ag. Rep. 1861, p. 604. feeds also on palms, & *Rhynchospora orientalis* *Limnarmanni* was found abundantly, on Florida decayed Palmetto wood. *IS*. *XIII*/21. (Col.) J. Glover

- Grissonia*. (Fam) *Wachters*. (Orth) *Manitidae*. Ag Rep 1874 p. 130. (Orth)
- Grouse beetles. see *Carnibellus* (Col) (Rathvon) Ag Rep. 1861 p. 591. (Col)
- Grouse locusts. see *Telusa*. *Telusa* (Orth) *Rathvon*. 1862 p. 387. (Orth)
- Grouse locust. black mated. (Orth) *Telusa* (Telusa) later cited. Ag Rep. 1862 p. 387. *IS*. V. 7. VIII. 7. (Orth)
- Grub in head of sheep. see *Desinus* (Orth) Ag Rep. 1864 p. 563. *Cephalomyia*. *IS*. VII. 36. (L. 4.)
- Grub white. & the Larva of *Phyllophaga*. *Lachnostoma*. En. Jura. *T. Jura*. *IS*. C. 10. (Col)
- Grubs destroyed by sowing coarse salt. Ag Rep 1869 p. 296. (Col)
- Grubs in stems of plants (Europe) destroyed by *Malachius canescens*. Ag Rep 1865 p. 291. (Col)
- Gryllidae*. Ag Rep 1865 p. 308. 1874 p. 142. (Orth)
- Gryllotalpa*. mole cricket (Orth) *Remedes*. Ag Rep 1864 p. 544. 1868 p. 305. (Orth)
- Gryllotalpa*. (*brevipennis*), *canalis*. (Orth) (Rathvon) Ag Rep. 1862 p. 374. fig 12. injures & destroys roots of plants. — shone winged mole cricket. injures potatoes, green sod. vegetables. Ag Rep. 1874 p. 144 fig 15. *Gryllotalpa borealis*. *IS*. VII. 13. (Orth)
- Gryllotalpa didactyla* (Orth) said to injure sugar canes in the West Indies (Rathvon) Ag Rep 1862 p. 378. 1874 p. 144. *IS*. XVI. 14. (Orth)
- Gryllotalpinae*. (Orth) Mole crickets. feed on both vegetable & animal substances. 1874 p. 143.
- Gryllus*. *centurio*. see *Romalea microptera* injures vegetables, peaches, figs, & orange trees; & melon. commonly known in Florida as the "rubber" grasshopper. (Ag Rep. 1868 p. 265. 1862 p. 384. — 1872 p. 116 fig 6. 7. *Romalea microptera*. *IS*. VII. 14. (Orth)
- Gryllus*. *richardi*. domestic (Col) & *US*. (Orth) domestic or house cricket. nocturnal & destroys animal & vegetable substances. Ag Rep. 1874 p. 142. fig 15. *IS*. VI. 27. (Orth)
- Gryllus*. (*acusta*) *migratorius*. *Cedroba* Migratory locust of Europe, Sweden, France, etc. & and elsewhere. more mention (Rathvon) Ag Rep. 1862 p. 385. see *Pachylus migratorius*. *IS*. XIV. 10. (Orth) (*Cedroba migratoria* *IS*. XIV. 10. *Locustia peregrina* *IS*. XIV. 11. (we said to be the true *White Locust*.)
- Gulls, destroy *Anabus simplex*, or the Utah cricket. in Utah. Ag Rep. 1871 p. 79. This cricket is said to injure grass, wheat & is wingless. *IS*. XIV. 15. (Orth)
- Gymnetis nitida*. June beetle, *Allothuna nitida*. known in Florida as the fig eater from its habit of eating into ripe figs. (Ag Rep. 1863 p. 569. — *ditto*. 1868 p. 94 fig 32. *Allothuna nitida*. *IS*. VIII. 19. (Col)
- Gymnetis nitida*. (Col) (Rathvon) Ag Rep 1861 p. 651. fig 37. says these insects are sometimes abundant on potato tops, & the larvae feed on the roots, *Allothuna nitida*. *IS*. VIII. 19. (Col)
- Gyrinidae*. (Col) little black beetles, seen circling about on the surface of still water, & hence called whirligigs, or apple bugs, from their smell, devour dead insects on the water. Ag Rep. 1868 p. 86. (Col)
- Gyrinus*. *navigator* (Col) Ag Rep 1864 p. 489. habits as above. (Col)
- Gyrinus*. *americanus*. Col. Ag Rep. 1868 p. 81. *G.* swims in curves or circles on the surface of still pools. feeds on dead insects. *IS*. III. 14. see *Sineuris* (Col)
- Haltica*. *graptodora*, *chelybea*. (Col) see *Graptodora*. Ag Rep. 1863 p. 576. 1870 p. 74 fig 29. *Graptodora*. *IS*. XXV. 6. (Col)
- Haltica* (*Phylloreta*) *striolalis* (Col) Cabbage flea beetle. *H.* eats minute holes in leaves of Cabbage & Ag Rep. 1865 p. 289. see *Orchestrus vittata*. *IS*. XXV. 8. (Col)
- Hammatocerus*. (*Habes*) *fuscus*. *H.* destroys other insects Ag Rep. 1875 p. 130. fig 4. *IS*. III. 14. (Col)
- Hanneton (Col) Europe French common name for May bug: or cockchafers. Ag Rep 1865 p. 29. (Col)
- Hauite, cakes made from the eggs of *Corixa*. in Mexico. see *Corixa formosa* or *mexicana* example of *Corixa intermedia* (US) *IS*. V. 7. *Het*.
- Harlequin* Cabbage bug. *Stenobothrus* *Murgantia*, *astrioncha* injures Cabbages, radishes, mustard & Turnips, foliage & other Cruciferae. Ag Rep. 1867 p. 71. fig. — 1870 p. 90. — 1871 p. 84 fig 16. 1875 p. 116 fig 3. *Murgantia*. *IS*. II. 22. (Hil)
- Hemiractor* (*Murges*) *canalicus* (Obol) destroys *Doryphora* *Chrysomelae* & *larvaceae*. *Formica* of *Africa* {prod rosaceana & other insects. Ag Rep. 1867 p. 63. 1874 p. 123. 1875 p. 130. fig 14. *Melias canalicus*. *IS*. III. 12. *Hed*. *IS* Gen. c.

Harpalus (Col) (Rathvon) *Ag. Rep.* 1861, p. 692. "one or two species are said to feed in the

perfect state, on young grass, & great seeds & upon the roots in the larva state." (Col)

Harpalus (Col) *Ag. Rep.* 1854, p. 87, p. 88. feed upon other insects. (Col)

Harpalus, *pusillus*, *berle*, L. 173. Col. *Ag. Rep.* 1852, p. 110, *Ag. 2*, destroys, other insects, in cotton fields. (Col)

Harpalus (*Pungus*) *caliginosus* (Col) supposed to feed on wheat, & grass seeds, & probably on other insects also. *Ag. Rep.* 1868, p. 80, *Ag. 10*. — & destroys. *Doryphora* (*Chrysomela*) 10 *lineata*. or Colorado potato beetle. *Ag. Rep.* 1874, p. 128. *SS. 1/9*. (Col)

Harpalus, *herbarius*, Say (Col) (Rathvon) *Ag. Rep.* 1861, p. 692, said to be a vegetable feeder. (Col)

Harpalus, *rupestris* (Europe) (Coe.) said to eat grain. *Ag. Rep.* 1863, p. 463. (Col)

Harpalus, *gracilis*, *herle*, L. 173. *Ag. Rep.* 1861, p. 692. *SS. xiv/15*, *xiii/1*. (Orth)

" " " " *Ag. Rep.* 1867, p. 65. 1874, p. 187. *SS. 1/9*. (Orth)

Harpalus, *fly* (Horn) see Cicada. *Ag. Rep.* 1866, *Locust* carried off by *Stenus speciosus* (Horn)

Harpalus, *moth*, see *Sphingidae*. *Macrosila* & *ex. Macrosila* *Ag. 2* (Col)

Harpalus, *maggot* of *Shuck*, see *Ephialomyia*, *ous*. *Ag. Rep.* 1872, p. 129, see *Ephialomyia*, *xii/36*, (Col)

Harpalus, *worm* of *cabbage* (Col) *Rovis* *Rapae*, injures also *Cabbag*, *Cauliflower*, *Mustard*, & *turnip* & other cruciferae, (European) but now imported & naturalized. *Ag. Rep.* 1870, p. 77, *Ag. 36*. *SS. 1/18* *Ins. No. 133/2*, & *Ins. 139/14*.

Harpalus, *unimaculatus* (Col) *L.* in Walnut wood. *Ag. Rep.* 1867, p. 72. 1874, p. 73, *Ag. 26*. see *Molochus* *SS. xvii/31*.

Harpalus, *phloxophaga* *Lept.* I destroys *phlox* plants. *Ag. Rep.* *SS. lxviii/18*. (Col) *Ag. Rep.* 1867, p. 74

Harpalus, *arvensis* (L.) *unimaculatus*, *Orn* worm or *mauve* & *bell* worm of *cotton*. *Ag. Rep.* 1864, p. 64, *Ins. xiv*.

{ *Lept.* injures *cotton* bolls, *mauve* men growing in the col. green *peas*, *pumpkins*, & —
{ *fruit* of the *Tomato*. (*Harpalus* error of *D. 1/5*) should be *Linca* *gracilis* 1855, p. 48, *Ins. 1/3*.
{ see *Linca* 1854, p. 534, *remedies*. — 1865, p. 43 — 1866, p. 30 — 1870, *remedies*. *Harpalus* & *2*, *Ag. 1*
{ *SS. 1/18*, *xix/21*, *17/12* (Col) — & 1871, p. 54 —

Harpalus, *Veratrum album*, powder, & used to poison native & imported *carrion* worms.

{ see *Psylliophora* *grossularis*, & *Nematodes* *ventricosus*. (Horn)

Harpalus, *unians* (Col) *Ins.* found in *cavities* under bark of *Oak* wood, in *Ind.* in winter, & spring.

{ *Ag. Rep.* 1868, p. 101, *fig. 147*. see *Platydoma* *SS. xxvi/16*. (Col)

Homocidus, *Lace* *wing*, *fly* (Ours) I destroys *cotton* aphid. *Ag. Rep.* 1864, p. 63, *fig. 8*. —

{ 1855, p. 115, *fig. 10*, *fig. 7*. — 1863, p. 10 — example *H. hyalinus* *SS. 1/13*. *Nour*

Homoptera, or half winged insects includes *Helioptera* or plant bugs & *Homoptera* (cicada

{ *phlox* *louse* &c.) 1864, *Ag. Rep.* — 1862, p. 387. — 1864, p. 274. — 1866, p. 40 — 1869, p. 207 — 1874, p. 114
{ 1875, p. 115 &c.

Horn, *lice*, (see in *Mallophaga*) (Orth). Biting *bird* lice, *remedies*. *Ag. Rep.* 1874, p. 146. (Orth)

Hesperidae, *Lept.* *Ag. Rep.* 1868, p. 314. (*Shippen*). example *Hesperia*, *cernis*. *SS. xxvi/16*. (Col)

Hesperia, *fly*, *slip* see *Cecidomyia* *destructor*. *L.* injures *wheat*, &c. *Ag. Rep.* 1869, 562, &c. &c.

{ see *Cecidomyia* *destructor* *SS. 1/8*, *9*. (Col)

Heteroceridae (Col) *mea* *monitior*, *Ag. Rep.* 1868, p. 85. (Coe)

Heteroptera, or plant bugs, *Ag. Rep.* 1863, p. 563. — *remedies*. 1866, p. 557. — 1866, p. 43. 1868, p. 315.

{ 1875, *long* *antenna* with *figures* p. 114 to 140.

Hickory *borer* (Col) see *Chion* *abietis*. (*garganicum*) *SS. x/8*. (Coe)

Hippodamia, *convergens* (Col) (*concolor*) I destroys *plant* lice, &c. *Ag. Rep.* 1874, p. 128 *SS. xxv/23*, *32* (Col)

{ & also destroys — the Colorado potato beetle, *Doryphora*, (*Chrysomela*, 10 *punctata*.

Hippodamia, *decem* *punctata*. *Brachyacantha* 10 *punctata*, destroys *plant* lice & *cicada*

{ the Colorado potato beetle, *Ag. Rep.* 1874, p. 128, *Brachyacantha*. *SS. xxvii/21*. (Col)

Hippodamia, (*Megilla*) *maculata*. Col. *Ag. Rep.* 1866, p. 41, is destroyed by an *Ichneumon* *fig.*

{ which emerges from under its body, & forms a cocoon there. — it also destroys the

{ Colorado potato beetle, *plant* lice & other small insects 1874, p. 73. *Megilla* *SS. xxvii/21*. (Col)

Hippodamia, *quadrata* *punctata* (Col) destroys the potato beetle. *Ag. Rep.* 1874, p. 73. *Ins. 1/10*

- Hydra terminalis* (Orth.) said to be destroyed by *Gaigulus* (Col.) Ag. Rep. 1855, p. 132. SS v/2, 177.
- { *Hydra* see *Tridactylus*. SS III/6. (Orth.)
- Hydrocora*. (Clerch.) *numerales*. (Col.) *men* mention. 1865, p. 97, fig. 141, Ag. Rep. SS XII/30. (Col.)
- Hydrocorisae*. (Kelt.) water bugs. Ag. Rep. 1875, p. 132.
- Hydroscutidae* Water measurers. (Kelt.) from running on surface of water. Ag. Rep. 1868, p. 315.
- Hydrothripidae*. (Col.) Ag. Rep. (Rathvon) 1861, p. 593. — L. predaceous. Insects feed on decaying
- { vegetables. Ag. Rep. 1868, p. 81. 307. (Col.)
- Hydrophilus piceus*. (Col.) (Eu.) feeds on plants & aquatic mollusks. Ag. Rep. 1868, p. 51. (Col.)
- Hydrophilus triangularis*. (Col.) Ag. Rep. 1868, p. 81 fig. 14. aquatic in habits. SS III/18.
- Hydrophilus* & water beetles in aquaria. Ag. Rep. 1864, p. 459. (Col.)
- Hydrophilus piceus* (Col.) is a harmful beetle & suiter for an aquarium. Ag. Rep. 1864, p. 459 (Col.)
- Hydrinus aculeatus*. (Col.) a wood boring beetle. the larva of which is destroyed by *Thaumus* SS XII/12
- { *nigricollis*. SS XII/12 see *Thaumus aculeatus* Ag. Rep. 1868, p. 97. SS XXXVII/17. (Col.)
- * *Hydroctes americanus*. (Col.) L. mod. of Oak Forest trees. Ag. Rep. 1863, p. 98. & *Hydroctes*
- { *laevis*. SS XLIII/14. (Col.)
- Hydroctes piceus*. (Col.) (Rathvon) Ag. Rep. 1861, p. 605. fig. 48-49, 50. L. eat wood of pitch pine. SS XLV/10
- Hydroctes piceus*. (Col.) eat under bark wood of pine. Remedies. & Ag. Rep. 1863, p. 573.
- { SS XVI/14.
- Hydroctes vagans* (Col.) eats through lead & zinc, food from pine. *Calidum* & *incomitely*
- { *Cuculus* of Rathvon. 1861, p. 616. *Hydroctes vagans*. SS XVII/3. (Col.)
- * *Hyphanthus*. (Arctis.) tent. Feed web worm. Weaver, & forms cotton like nests on ends
- { of large limbs. of Persimmon, apple, cherry, elm, plum, &c. &c. Flies in society as
- { Caterpillars. SS S. VIII/5, 8, 16. SS LIV/13, 18. (Lep.)
- Hymenoptera*. *remedes*. Ag. Rep. 1862, p. 388. — 1864, p. 530. — 1866, p. 40. — 1868, p. 309.
- Hyposiderma* (Linn.) *bonis* (Lep.) skin bot fly of the ox — *normals*. holes made by larvae
- { Ag. Rep. 1872, p. 129, fig. 15. habits *remedes*. &c. SS L. VII/35. S. VIII/21. (Lep.)
- Hyphobolus bicolor*. (Eu.) (Col.) L. said to destroy the larvae of wood eating insects.?
- { Ag. Rep. 1865, p. 91. (Col.)
- Hyphobolus* (Corticus) *hamulatus*. (Col.) L. in wood of junio (Col.) Ag. Rep. 1868, p. 100, fig. 166.
- { *Corticus*. SS XXVI/3. (Col.)
- Hyphophyllum*. a spider destroying young caterpillars of *Pieris Rapae*. or the European
- { Cabbage butterfly. Ag. Rep. 1875, p. 82, 83.
- Hypocyba*. (Humphries) (Lep.) see *Isotria costalis*, or the clover worm. SS I p. 1, LXIII/25. (Lep.)
- Schnemann* (Lep.) destroys Aphides. (Plant lice) & other insects. Ag. Rep. 1854, p. 84, pl. 8. (Hym)
- Schnemann* fly? (Hym) destroys cotton plant lice & other insects. Ag. Rep. 1855, p. 112, pl. X, fig. 4.
- 1857, p. 125. — P. Rathvon Ag. Rep. 1862, p. 376 destroys eggs of Cockroaches —
- { parasitic in Caterpillars & other insects. Ag. Rep. 1864, p. 387. — destroys *Hippodamia*
- { *maculata*. (Col.) SS XXX/65. (Lep.) 1866, p. 41. — *Cerostoma brassicae* *Pisellae*
- { *lunipennellae*. (Lep.) on Cabbage. SS XX/28. SS XVIII/30, 31. — *Pyrroctia* *lunipennellae*
- { 1866, p. 41. SS VIII/10. SS VII/7. (Lep.)
- 1 destroys *Pissodes* *Strobus*. Col. SS XVI/11.
- " on eggs of plant lice Aphides. Ag. Rep. 1866, p. 42. — destroys *Acroneura* *Lep.* SS LXIX/28
- { *Acroneura* *varicosa* (Lep.) XXXVI/3. & *Anisota* *senatoria* SS VI/56. SS VII/15. 18. (Lep.)
- Schnemann* fly? destroys *Cephus pygmaeus* in stems of Wheat. SS I. 18/5.
- " flies making cocoons agglutinated together like a honeycomb. destroy L. of *Ceratomia*
- { *quadrinervis*. (Lep.) cocoons. SS V/4. (Hym)
- Schnemann* forming a large mass of loose woolly cocoons. from *Macrosila quinquevittata*.
- { SS VII/6. (Hym) Ag. Rep. 1873, p. 159
- Schnemann* fly, destroying Aphides. Plant lice. Ag. Rep. 1858, p. 262. (Hym)
- Schlyura* *inches*. (*Clavaria americana*) profilar spinner. injures foliage of Rabbits. mallow.
- { Remedies. &c. — SS L. VII/13. In SS VII/3. (Lep.)

41.

Indian. *Cetonia*. *Euryomyia* (*Blenius*, *Cuthareus*) inde. see *Euryomyia inde*. IS IX/29

Indian. East. see *Maia*.

Indian. East. West. Indian bee. see *Apis acraensis*. & *laboriosa*. Ag Rep. 1866. p 32. (Hym)

Insect. *Helix*. Ag Rep. 1858. Jan. 3. p 124. (Hel.)

Insect. *Helix* a parasite destroying *Academya destructor*. example *Insectum insensu*
 { IS IX/3, (Hym.) Ag Rep. 1872. p 136.

Insect. destroyed by means of the so called Persian insect powder. made from the flowers of
Pyrethrum Persianum. *P. persicum* & *P. regium* (of *new* *expositum*) Ag Rep. 1862. p 92.
 { 1861 p 228.

Insects destroyed by *benzene*. Ag Rep. 1861. p 332. — poisoned by *Colart*. Ag Rep. 1855. p 68.

" destroyed by *Nichia urederach*. or *Pride of China tree* Ag rep. 1855. p 67.

" to be destroyed by concussion from exposure of powder. Ag Rep. 1871 p 88. p 111

" trap or lantern to allure by light & entrap. description. Ag Rep. 1855. p 60.

Insect. double. scoop net to catch insects, with fig. Ag Rep. 1874. p 160. fig 11.

Insects. destroyed by *Melias amatus* (Hel.) (*Confractor* Syn) see *Melias* IS III/12.

Insects. Loss by insects \$100,000,000. per annum. — best allies to destroy them are birds.

{ (by *Harvey*) Ag Rep. 1871. p 421.

Insects Amount of losses by depredations of insects. Ag Rep. 1868. p 305. — losses by. 1873 p 9.

" " " of cotton insects. Ag Rep. 1873. p 164.

Insects at the Paris exposition. of 1868. p 88.

Insects frequenting the cotton plant. Ag Rep. 1855. p 65. (Note many of the names in this
 { years report are wrong especially the Angicered names, having been invented
 by a former chief clerk. Mr J. H. Moore, for the occasion without consulting any
 entomologist. The first part of Ag Rep. 1857. to p 125. was also written entirely by
 J. B. & not by Moore, whilst the 'light & figures' are by J. P. all the signed J. B.

Insects injurious to cotton. Ag Rep. 1858. p 271. Insects injurious to vegetation 1858. 286. t 271.

Insects injurious and beneficial to the Orange tree. Ag Rep. 1858. p 110.

Insects injurious to vegetation fruit trees, &c by P. D. Weber. Ag Rep. 1860. p 312

" " " as Rep. on Entomology by E. S. Rathvon, 1st Rep. 1861. p 535 2nd Rep. 1862. p 372

Insects short articles on. Families Habits, by E. A. Samuel. Ag Rep. 1863. p 274.

Insect articles in Ag Rep. 1865. p 33 Rep. of Entomologist. p 88 Paris Exposition. p 204 m m &

{ 283 on *Onion* fig. 4.

" how to send specimens. Ag Rep. 1872. p 123.

Insects noxious. *Reley*. Ag Rep. 1871 p 374. — 6th Rep. Mo 1874. p 441. word insecticide, criticised

Insect anatomy for beginners. *Collop.* figure Ag Rep. 1864. p 58. (more sketch)

Insects & their uses (guins, gulls, bees, & honey. *Histor* figs 8th & 9th. Ag Rep. 1866. p 29. - 31.

Sodine & torch used for attracting slugs. Ag Rep. 1861. p 332.

Ips quadrigatus. (probably *quadrigatus*?) (see *Pityophagus*.) (col.) burrows in sweet corn

{ (Maure) Ag Rep. 1868. p 83. fig 34. see *Pityophagus quadrigatus*. IS IV/14 XXXIV/5?

{ XIV/2. (Col)

Ipsini. — Ag Rep. 1868. p 105 *Col*

Ipsoma hodei. Joint worm in wheat. (Syn *Eurytoma*) Ag Rep. 1874. p 76. p 5. — 1863. p 42.

{ injures *Barley*. *Rey*. wheat. causing a swelling & enlargement of joint of stalk

{ 1864. p 57. *Rey* — 1866. p 42 it is destroyed by a parasite *Promethis* or *Phylagaster* (Hym)

Ipsoma hodei IS IX/26 Hym

Italian Bees (by *Parsons*) Ag Rep. 1859. p 543. *Apis ligustica* 1866. p 32 IS IV/24 Hym

Itch insect. *Acanus scabiei*. Ag Rep. 1864. p 566 remedy. & 1871. p 426.

Itchycones curculionoides novaeboracensis (*Nova Eboracensis*) *Wier*. Ag Rep. 1860. p 321.

eat buds & twigs of Apple. gnaws into buds at their base. (Rathvon) Ag Rep. 1861

{ p 604 fig 45. injures buds of Apple Cherry Pear &c. — New York weevil.

Also, injures buds & twigs of Pear, plum, cherry, maple. Oak. &c. Remedies &c 1863. p 574

Itchycones novaeboracensis IS VII/17. (Col)

39 lower.

42.

- Jackson W. Chemical researches on coloring matter of *Perthocoris*, *Dysdercus*, *Suturicus*
 { on Cotton Stainers. (Hb.) Ag. Rep. 1858, p. 271. *Dysdercus suturicus* 39. 1/11. (Col.)
- Jassus. (Coelidea) subfasciata. (Bom.) J. frequent Black alder & Blackberry. Ag. Rep. 1876, p. 31.
 { 39. 11/36. (Bom.)
- Jenequa, or Sidal hemp, an insect called maax, borrows through the central portion of the
 { plant. & two other insects called cochoh, & Rax lach. prey on young leaves. &c
 { see remedies. Ag. Rep. 1869, p. 246.
- Japanese earth worm, see Megacelis Ag. Rep. 1871, p. 82.
- Jigger. (also Chigoe) see *Sarcophylla pentsters*. Ag. Rep. 1872, p. 136. (Dip.) a small flea like
 { insect that buries itself in the flesh of man & animals. (Frequently under the toe nail,
 { where it lays its eggs in the wound, these when hatched out into little fleas, often
 { cause a dangerous sore, sometimes even necessitating the amputation of the limb & note.
 { This term Jigger? (Bete range of Tex) in the south & mid. states, is also applied to a
 { small mite, or acarus, known also as the "red bug" which buries itself in the flesh
 { of man & animals, causing an intolerable itching, & a small water blister which when
 { burst, becomes a sore. Salt water is recommended as a remedy, rubbed over the
 { places affected as soon as possible after being in the fields.
- Joint worm. *Taenoma* (*Eurytoma*) *hordei*. It causes knots & distorted swellings in the
 { joints of several birds. Ag. Rep. 1852, 76, p. 5. — 1861, p. 42. — 1864, p. 547. 39. 1/26 (Eym)
- Julidor. *Julus*, miscalled mole worm, enters by manure. (Birds) & said to be destructive to
 { ripening fruit, living on the ground. (Murelidae) Ag. Rep. 1864, p. 354.
- June bug or more properly beetle see *Gymnetis*. *Altorthina nitida* Ag. Rep. 1868, p. 94, 98
 { (Cetonia dyn) (Altorthina 39. 11/10 (Col)
- Katydid. *Microcentrum retensum*, & *Phylloptera oblongipennis*. (Orth) & in Florida injure the
 { foliage of the orange trees. 39. 11/5 & 4. (Orth)
- Katydid. see also *Platyphylloptera*, *Cyrtophyllus*?, *perspicillatum* (Orth.) & *Phylloptera*.
 { Ag. Rep. Rathvon. 1862 p. 350.
- Katydid. (Orth) *Habitus* food? Ag. Rep. 1874 p. 141. 39. 12..
- Kennicott. Animals & birds, with plates. Ag. Rep. 1856, p. 52, to 110..
- Kestrel. an insect attacking Swiss hemp. Ag. Rep. 1869, p. 204..
- Labia. (canis) Ag. Rep. Rathvon 1862, p. 373. m. m. ex *Labia minuta* 39. 11/10 (Orth)
- Lalidora Ewing (Orth) m. m. Rathvon Ag. Rep. 1862, p. 375. (Orth)
- Lace insect, making shell lac. *Stok. lac* & see *Coccus lacca*. Ag. Rep. 1866, p. 34. (Bom)
- Lace wing. Ely. see *Homocidus*, & *Chrysopa*. (Neur) Ag. Rep. 1866 p. 40 1868 p. 309, 1872 p. 86.
 { p. 8. *Homocidus*. — 1853, p. 115. p. x. fig 7. 1866 p. 40. *Homocidus hyalinatus* 39. 11/13 (Neur)
 { *Chrysopa* I feed on aphides Ag. Rep. 1864 p. 545. — 1866 p. 40 — 1872 p. 133. *Chrysopa*
 { *oculata* 39. 11/3. (Neur.)
- Lachnosterna. see also *Phyllophaga*, (Col) Ag. Rep. 1866 p. 39. — 1866 p. 3a. 7: 9: (Col)
- Lachnosterna see *Phyllophaga*, 39, generally known as May bugs or beetles, m. m. Ag. Rep. 1873 p. 132.
- Lachnosterna *Phyllophaga* fusca (Syn *Phyllophaga quercena* of Harris) May beetles. The
 { larvae are generally known by farmers as "white grubs". The larvae feed on subter-
 { ranean parts of grass &c. The insects feed on the foliage of Apple, Elm, Maple, Oak.
 { Cherry, plum, Forest or fruit trees in general. Ag. Rep. 1868, p. 85 fig 67. 1872, 122.
 { 1872, 119 & 120. Localities injured. 1872, p. 122. — 1872 of the larvae (White grubs)
 { were counted in a single hill in Grayson Co. Va. Ag. Rep. 1872, p. 129. *Phylloptera*
 { fusca. 39. 11/11. XLV/40. MC/10 Larva or white grub. (Col.)
- Lachnosterna horticola see *Phyllophaga fusca*, & also. m. m. grass. 39, I foliage of fruit &
 { forest trees. see P. fusca. Ag. Rep. 1868, p. 88. (Col)
- Lachnosterna, *Phyllophaga mison*. Ag. Rep. 1868 p. 88, (Col) find *Thurvet* also P. fusca and
 { probably *Phyllophaga illis*? 39. XLV/30. (Col)
- Lachnosterna quercena — Ag. Rep. 1864 p. 353. — 1868, p. 104. see *Phyllophaga fusca*. 39. as above
 { 39. 11/11.

- Lachnus curvica* (Hom.) (Ag. Rep. 1876, fig 40. frequent *Bassacora*. History. Oak & Walnut. SS 160 (Hom))
Lachnus strobil. (Hom.) (Ag. Rep. 1876. frequent *Stale*, *Vine*, (Hom))
Lachy moth. (American) (Sup.) *Ciliocampa americana*. *decipiens*. or Tent caterpillars of the orchards.
 { Form large catenae like nests in forks of Apple & Cherry trees. 1858, p 389. - 1860. 321.
 1864 p 551. - 1866 p 29, 42. 1870. p 83. fig 45. It is destroyed by an Ichneumon fly
Chrysomelae elisocampae. 1864 p 42. *Ciliocampa americana*. SS eggs C 119. LXV p LXVI. C 190
- Lady bird, or Lady bug. see *Coccinellidae* (Co)
Laemophilus. (*Cicadis*) *modestas*. (Co). I found eating interior of hemp seed. Ag. Rep. 1864 p 34. fig 43.
 { *Laemophilus*. SS VII 32 (Co)
- Lagria*. (*horda*, (Co)) *Eu*. feeds on dead Oak leaves. Ag. Rep. 1864 p 101. SS. For A 50 (Co)
- Lagrideae*. Ag. Rep. 1868 p 101. (Co)
- Lamellicornia*. (Co) Ag. Rep. 1861 p 577. - 1863 p 566 - 1864 p 307. *Eu* (Co)
Lampyrus. (*Eu*) (Co) & *glauconota*. Feeds on *Smilax*. *Lone* small *Eu*. 1862 p 95.
Lampyrus & *Lampyrus*. Ag. Rep. 1868 p 95. Lightning bugs. Live fast. Ag. Rep. 1868 p 95. 160 & 307.
Lampyrus neotilica. Fire fly of the mid. Ag. Rep. 1868 p 115 said to eat roots & Sugar cane, etc.
- Lathrygma*. *frugiperda*. (Common bud worm) *Lathyrus* corn, wheat, & gram (*Phaenocarpa* Syn S & Q)
 { SS. 184 LXVII (Co)
- Lathrygma macra* Georgia or Southern grass worm *Lep.* probably *Prodenia autumnalis* (VIII 15)
 { (Reily) is only a more northern var. (Fall army worm of the north west. Eats grass
 threads in Cotton fields. SS L 30 XVIII 5. XIX 13. 1864.
- Lophyrus macra*. *Lep.* is destroyed by *Tachina anchipervora* (Lep.) & *Exochus* *uncomplanatus*
 + *Laneth*. Cotton by free labor. Ag. Rep. 1864 p 90.
- Larva* character. (*Eu*) *Solys* *larvici*. Feeds on *Larch*, or *Tamarix*. Ag. Rep. 1866 p 41. It is destroyed
 { by *Phryganea*. *larvici*. (Hom) *Solys* SS 3. LXVI 7.
- Large green tree bug*. of *Sith*. see *Pedius cynicus*. (*Urmagranis*) injures foliage. Oak. (Ames &)
 { I also destroy the 10 lined potato bug. *Doryphora Chrysomela 10 lineata*. Ag. rep.
 1873 fig 8 p. 118. *Pedius cynicus*. SS. 11 29. (Het)
- Large green tree bug*. *S. TB*. *Rhaphigaster pennsylvanicus*. *Parasitica*. *hirsuta*. sucks sap of grape.
 { & History. *Parasitica*. Forest trees, & Ag. Rep. 1873 p 117. fig 5. *Parasitica* SS. 18 4 (Het)
- Largus succedens*. (Het) *mot.* a vegetable feeder. Ag. Rep. 1875 p 126. fig 28. SS. 11 2. (Het)
- Larva* *argentata*. (*Byrrus*) *carnes* of *Cuckoo*. to its nest, to form food for its young. SS. 116 11 24. (Het)
 { Ag. Rep. 1866 p. 43.
- Lasioptera*. (Sup.) *Ma*. Ag. Rep. 1872. p 120. Ex. SS. XII 4. (Het)
- Lathridae* or *Lathridae* (Co) feeds under bark of *Oak* Ag. Rep. 1864 p 94. Ex. Lathridae
 { *conitharia* *lyrata*. SS. XXX 11 13. (Co)
- Lead*, bored through by *Hylephorus callidus* (*callidus*) *bayulus*. Ag. Rep. (Rathwell) 1861. p 10. SS. XVI 3. (Co)
 " " " *Chiron* (*garganeus*) *anctus* Ag. Rep. 1861/614. *Chiron* SS. X 3. (Co)
- Lebia grandis* (Co) destroys *Doryphora Chrysomela 10 lineata*. the ten lined *spaceman*, or *blond*
 { potato beetle. Ag. Rep. 1867 p 63. - 1868 p 79. fig 6. - 1868 p 80. - 1871 p 74.
 1874 p 123. (Co)
- Lebia*. (Co) Ag. Rep. 1868 p 80. 108. Ex. Lebia ornata SS. 11 4 (Co)
- L. caninus*. *venustus*. (Co) *venustus*. *maculosa*? frequently maple, & said to be the same as
 { the coccus infesting the Orange. *Maclura*? Ag. Rep. 1876. fig 53. SS. 11 13. (Hom)
- Leccarium* *coccis* *responsum* (Hom) injures foliage & of Orange & Lemon trees. Ag. Rep. 1876 p 50.
 { SS. p. VI. (Hom)
- Leccarium*. (*pyre*) (Hom) (Uhlen) Ag. Rep. 1864 p 51. injures *Lemon* & *Pear* trees. (Hom)
Leccium. *vanillozeli* (Co) I undermines bark of *prickly ash*. Ag. Rep. 1874 p 73. or *Stemidius xanthoxyli*
 { SS. XVII 13. (Co)
- Lema*. *trilineata* (Co) *Three lined potato beetle*. I carries a shield of feces over its back & feeds
 { voraciously on foliage of *Potato*. Ag. Rep. 1871 p 75. fig 6. SS. XXVII 10 (Co)
- Lepidoptera*. an order containing *Butterflies*. *Sphinxidae*. *moths* or *miller* *Ag. Rep. 1869 p 553*.
 { 1862 p 274. - 1864 p 385. - 1866 p 43. - 1867 p 472. 1868 p 94. 310 & 595. SS. 11 13. (Co)

- Lepisma sacchararia* (Lep.), "Silver fish" said to eat holes in Cases & covers of books & in clothes. Ag. Rep. 1866 p. 309. — 1876 p. 146, fig. 20. JS. VI/6. (Orth.)
- Lepismatidae* (Orth.) fish, named insects, of a silver bright tinge (hence name) having long hairs like appendages or tails, habits nocturnal. Found behind wall paper. &c. Ag. Rep. 1874 p. 146. (Orth.)
- Leptoglossus phyllophorus*, *Omscerellus albicinctus* (Fab.) Ins. found in cotton fields. Ag. Rep. 1853, p. 94. Fig. VIII. & destroys the Harlequin cabbage bug. *Stenocera* (Marguerite) has been on. JS. VI/21. (Orth.)
- Leptostylus oculatus* (Col.) injures Apple trees between bank & wood. Ag. Rep. 1860. p. 319. 1863 p. 576. Localities JS. X/11. (Col.)
- Leptura vittata* (Col.) Woodborer. of (Rathvon) Ag. Rep. 1861, p. 620, not recognized but resembles *Rhagium stenoacrus lineatus*. JS. XVI/9. XVII/47. (Col.)
- Leucania unpuncta* (Lep.) army worm of the north west destroys grass, grain & other crops. Ag. Rep. 1861 p. 532 remedies &c. — 1868 p. 79. destroyed by *Calosoma calidum* (Col.) — 1870 p. 53 fig. 46. — Localities injured Ag. Rep. 1872 p. 122. 1863 p. 275. Leucania unimaculata JS. L. xcviii/22. LXI/16. LXVII/7. (Lep.)
- Libellula* (Neuropt.) Dragon. Fig. *Leucis* damming roads. Horse doctor (Ind.) *Leucosticta* (Str.) destroys other insects. Ag. Rep. 1866 p. 40. & 1868 p. 309. Ex *Libellula semipalmata* JS. II/4. (Neur.)
- Lice* on head of mankind see *Pediculus humanus, capitis* (Hom.) Ag. Rep. 1876. Fig. 57. JS. (Hom.) II/46. →
- Lice* on Plants, see Aphides, Aphus, &c.
- Lice*, Biting bird lice, see Mallophaga.
- Lightening*, bugs, common name for the fly, *Lampyrus*, *Ellechna*, *Photuris*, &c. (Col.) Ag. Rep. 1868 p. 95 &c.
- Lilac*, measuring worm, Lep. see *Procycla armata*, Ag. Rep. 1871, p. 83 (Lep.) JS. LXII/11.
- Linear fork* saw *Dichelomycha linearis* (Col.) injures fol. of Hahoe. Ag. Rep. 1868 p. 57. JS. IX/13.
- Linden*, boxes, (Col.) *Saperda vestita*, I feed in wood of Linden. (Rathvon) Ag. Rep. 1868 p. 384. JS. XVIII/16. (Col.)
- Little land plant bug*, see *Lygus lineolaris*, or *Capsus oblineatus* see *Lygus lineolaris* JS. VI/5.
- Lixus angustatus* (Eas.) (Col.) in pith of beans. Ag. Rep. 1865 p. 90. (Col.)
- Lixus concavus* (Col.) Ins. found burrowing in stalks of *Rhus* &c. Ag. Rep. 1865 p. 90. 1870 p. 71. Fig. 17. JS. XXXIII/2. (Col.)
- Lixus paraptecticus* (Eas.) (Col.) Larvae reside in stems of *Sium* or *Water parsnip*. Ag. Rep. 1870 p. 71. (Col.)
- Lobelia botrana* (Rathvon) (Lep.) Grape berry moth. I feed in fruit & seeds. Ag. Rep. 1870 p. 86 fig. 32. *Lobelia botrana* JS. xcviii/3. CIV/2. (Lep.)
- Locusts*, & grasshoppers see *Locusts* &c. or *Locusts* improperly so called or Harvest flies 1867 p. 67 1866 p. 43, see *Cicadidae*. — *Locustidae* contains. Katydid &c. Ag. Rep. 1874 p. 160. (Orth.)
- Locusts*, *gryllus migratoria* (Pall.) Ag. Rep. 1862 p. 384 see *Pachylabus migratoria* JS. xiv/10. (Orth.)
- Locusts* (Orth.) 1865 p. 67. — 1862 p. 384. — *Locustinae*. Ag. Rep. 1868 p. 303. — *Locustidae*. Ag. Rep. 1874 p. 1404 contains Katydid &c.
- Locusts*, of J. B. Brown, probably is *Caloptenus femur rubrum*, destroys Cotton. Ag. Rep. 1865 p. 67. p. VI. fig. 3. JS. V/2. VIII/2. (Orth.)
- Locusts*, *carolina* (Orth.) (Rathvon) Ag. Rep. 1862 p. 386. Fig. 26. see *Edipoda*. JS. V/3. (Orth.)
- Locusts*, *sulphurea* (Orth.) (Rathvon) Ag. Rep. 1862 p. 386. Fig. 27. " " JS. V/6. (Orth.)
- Locusts*, *cuneipennis* (Orth.) Rathvon Ag. Rep. 1862 p. 386 fig. 28. *Chlocactis* R. see *Stenobothrus* JS. X/4. XII/18. (Orth.)
- Locusts*, as food for man. Ag. Rep. 1866 p. 38. (Orth.) JS. House.

Locust, red Egg-d. (1876) *Caliophanes pumilio* subvar., common yellow-brown of the eastern U.S.
 { *Op. Alp.* 1867. p. 75. fig. 2. 1870. p. 76. fig. 32. ♀♂. *Op.* 1872. VIII/2. (1876)

Locust	10/10, p. 6, fig. 52, 53. VII/2. (C. H.)	
} <i>locust</i> or <i>migratory</i> } <i>destructiva</i> by a species	(C. H.) <i>Comptosia</i>	eggs in egg sacks
	18, 4, p. 133. 18, 4, p. 133.	<i>C. H.</i> <i>C. H.</i>

Locust. { a large grasshopper (I not a Cicada)

Locust bones *Archomys* *Urytus* *pictus* & *I. leuc* in wood of Locust. *Urytus flexuosus* &c
 {*U. pict.* 1863 p 254. — 1870 p 70 22. — *U. pictus* *volcanicus*. 39. *LC* 16. 17. 5 XXXV/26 (C)

Leucosticte (Coe) *Hallam*, 1911 p. 609. — 1963 p. 300. I have in *mod.* (slp.)

{ beetle, 1861. 604. (Col.)

Long snouted, mil. insect. *Belonostoma nasutus*, L. live in Chesnuts, harts nuts, acorns, chinquapins.
 (see Rep. (Ketchum 1881 p. 605; fig 46.
 — 1870, p. 70, fig 13. 33. XIV/101 (Col)

Lophyrus albatus (Hem.). *White* *pure* *grass* fly. *Remedies*. *Ag. Rep.* 1874, p. 540. *ES: 1/22*. (1874m)

Lophyrus. *Decontei* (Hym.) injures Scotch and Austrian pines, Ag. Rep. 1867, p. 73. (Hym.)
 Destroyed by Insects. Ag. Rep. 1873, p. 4.

Losses by Cotton insects. Ag. Rep. 1873/1874, \$ 25,000,000. (See also use of Paris green in same article)
Gouse, Gulls causing gull *Gastrophysa* ^{sp} *mythicus*, *undulata*, on the *leaves* of a tree.

Loxotamia, or *Scrotaenia*, *neurocana*, var. *gossypii*, Ag. Rep. 186. t. 1. VII fig 3. L. *gossypii*

Microstigma, or *Stolomus*, *resacana*, var *gossypii*, *Det. Exp. 100.* villeg S. L. *exiguus*
 { cotton, forage.
 Lubber grass hopper, (Orth.) *Ranula: microptera*, *inquies* *foliae* of Orange trees, or *Flomela*

clubber grass hopper, (*Orth.*) *Membrac.* microptera, vivuus 1662, p. 384, figs. of Orange trees, on Florida.
 { *Achras*, cuts longitudo. 2^a *Ag. Pige* 1661, p. 165. — 1662, p. 384. *injures* peracans, figs.
 { melons &c 1572. 116. figs 6, 7. — *Locusts* injured 1822, p. 118. — 38. ix/25, (*Orth.*)

Eucanus. *cap.* *doma* (Col.) (Wherry's Rep. 1860: p. 320. Horn. Tag. Stag beetle. S. on leaves of *Ophe* 1861. p. 348. fig. 28-29. do. (Rathvon). I wood & various other trees. Sp.

[illegible]

Lecanospira, Ins. Feeds on Saps of trees, & sometimes on soft bodied insects. Lucania

Lucinidae. (*Cole.*) I feed in wood. Ag Rep., 1861 p 600. — 1863, p 274, — 1868, p 85. (*Cole.*)
Lucilia caesar (*Linn.*) meat fly. (steel blue or green) destroy fresh meat. carrion &c. colors
 { Ag Rep. 1879 p 127. G. & C. 1880. p 23.

Lumbricoides, larva from S. Carolina, (Col. Ag. Rep. 1872 p. 132. fig. 21. SS. 4/202. (Dep.) see *Malinactes*. Ag. Rep. 1873 p. 162. fig. 10. (Col.)

Luminges insects in *Trachea* (Col), see *Tyrannosaurus physalensis*. Experiment with leg in 4.
 Ag. Rep. 1873, p. 155, fig 4. Fig. XI/21. (Col)

Lamprocyas, Earth worm. Said to be good for *Proctos pyralis*. 33 L.C/33. I.XII/6. (id.)
Lygaeus, on Cotton & D.I.B. is *Andrenome insidiosus* (Hottel) Ag. Rep 18 p. 56 pl. IV/4. 33 I/6.

Ligaeus *left* or *Colton Staines* v. *Red-bay* of *Florida*, *test* 1, *Ag. Slip* 1535, *h* 103, *fil* 1X, $\frac{2}{3}$ 7 (*Cyrtobacrus*).
as *Lysidiscus sutorellus*. *JS* 1/1, *H* 1

Lycus cruentus (Col) frequent, flowers. Ag Rep 1868, p 95, fig. 122. — *JS* xxxiii/24. (Col)
Erycaeus (coincis) (Hov). Ins. found under bark. Ag Rep 1865, p 122, fig 22 *JS* m/1, red

Lycaeus *leucocis* (Hov.). Imm. found under bark. Ag. Rep. 1875: p. 122, fig. 23. 39 m, red.
Yucca, (Hov.). Larva caterpillars of *Euclyptus* sp. (Lep.) caterpillars on *Yucca* on
 "millwood, Ag. Rep. 1875: p. 121, fig. 21. 32 1/11, 2 sp. (Hov.).

{ increased, *Og. Rep.* 1875, p. 121, fig. 21. $\frac{52}{11} \times \frac{11}{12} \times \frac{10}{11}$ 1/9. *Foot*
 { *tervicius* (Hot) destroy caterpillars of *Euchaetes* cyle, on *Asclepias*, milk or silk used, *Og. Rep.*
 { 1875, p. 122, fig. 22. $\frac{58}{11} \times \frac{11}{16}$. Hot

Sygaerda. (West) ^{1015, p. 127. fig. 22.} ^{1887/6. Not}
 Larvae found on plants on roots on ground some of them feed on other insects
 19 Sep. 1876. (West)

Erygus. *lincolni*. (Hbst) *Erygus oblongatus* or *lincolni*. Little innid plant seg. injures Peas, vicijs.
(Graspe inner. Plantes. strachanensis. Small Quince. & succumbent. Flowers of Crabapple &c

Grape weev. *Ptilinus*, *Strobilomyces*. *Grain* *Quercus*. ♀ frequent flowers of Cabbage, &c -
and is said also to destroy the eggs of the 10 lined Colorado potato beetle, & other
insects. *Gr. Res* 1874. 6. 1. 31. *Syn. Ptilinus* 78. 2. 1. 1. 78.

(Insects. Ag. Rep., 1875, l. 126, fig 34. . Syngus lineolaris Jr. n/s/Het. Isab.

Lygus lineatus (Fab.) *Capsus*, & *Phyllocoris*, quadrivittatus, injures fls. of Currants. Raspberries. must.

{ *Megelia*, *Deutera*, *Ritidorsalis*. Raspberry. Dahlia, &c. "Four striped plant bug".
Ag. Rep. 1875 p. 125, fig. 33. *IS. 1/9* (Holt)

Symyxylon navale (Ew) (Col.) injures naval ship timber. Ag. Rep. 1868 p. 98. (Col) *IS. XXV/p. Col*
Symyxylon soriceum, (Col) Injures wood of Oak & other forest trees. Slicky Timber beetle Ag. Rep.
1868, p. 98. fig. 166. (Col) *IS. XXX/2a* (Col)

Symyxylidae? (Col) mere mention. Ag. Rep. 1868, p. 98. (Col)

Lytta aenea, (Col) see *Pompilus* (Col) Ag. Rep. 1868, p. 103. fig. 184. (Col) *IS. XXVIII/1*.

Lytta cinerea, *abrita*, *marginata*, *nittata*, & *vittata*, native species sometimes used instead of
{ European. *Cantharides* or blister flies. see *Epicausta*. &c. Ag. Rep. 1866 p. 34. (Col)

Lytta fulgipes (Col) see *L. Pyrrhiza*. (Uhler) Ag. Rep. 1860, p. 315. (prob. *Epicausta* (Col))

Lytta pyrrhiza (Col) prob same as *Lytta fulgipes* (Uhler) Ag. Rep. 1860 p. 315. injures leaves
of Pear. prob *Epicausta* Col.

Lytta Epicausta, *vittata*, (Col) Blister flies. Eaten by Toads. Ag. Rep. 1870 p. 91. — 1866 p. 34.

{ 1869, p. 541. 1870, p. 90. *IS. XXVII/12* (Col) see *Epicausta*.

Macrobasis albidus, (Col) injures potatoes & vegetables. Ag. Rep. *IS. XXXVI/3a*. (Col)

Macr. Buceator an insect belonging to genus Scarabaeus, which goes through the contras
{ part of the Swale hemp, see *Jenequon*. Ag. Rep. 1869, p. 264.

Macrobasis Fabricii. *Epicausta*, or *Cantharis cinerea* (Harris) (Col) feeds on foliage of Honey
{ & common Locusts. Wild Indigo. Potato. Peas. fruit of Apple &c. Ag. Rep. 1868, p. 103, fig. 179.
injures Beets potato. fls. & is said to destroy *Doryphora* *Chrysomelae* & *univale* Ag. Rep.
1874 p. 123, see *Macrobasis unicolor* *IS. XXVII/p. (Col)*

Macrobasis unicolor, (Col) see *M. cinerea*, *debilis*, & *micronis*. Synonymy. Ag. Reps. 1867, p. 64. —
IS. XXVIII/9 (Col)

Macrodactylus subpinus, Ag. Rep. (Pathwork) 1861, p. 602. fig. 41, 42. L. feed on underground
roots, & destroy foliage Rose. Grape, & blossoms) Cherry, &c. — 1863, p. 567, Rose.
remedies. "Rose bug" — is poisoned by blossom of *citellus*. 1865, p. 89.
1866 p. 99. injures. — 1867 p. 77. mere mention — 1868 & 87, fig. 65. injures fruit &
foliage of Grape, apple, cherry, plum, Peach, Oak, rose, vegetables maize, grass.
frequent Yagers, especially of Grey daisy. Rose, Grape, &c. fact this insect is almost
omnivorous. — 1874, p. 125. in Kansas. *IS. IX/23*. (Col)

Macroglanis (Hym) parasite in *Acanomyia* destructor, a fly injuring wheat, &c. Ag. Rep.
{ 1872, p. 126. Example *Macroglanis penetrans*. *IS. IX/2*. (Hym)

Macroscia Carolina (Lep) L. infested with parasitic *Tachinid* flies which spin small oval
cocoon, on its body. (*Microgaster congregata* (Hym)) Ag. Rep. 1866, p. 42. — 1870, p. 627.
Larvae or young caterpillars destroyed by wasps, & hornets. 1872, 123.

Common names. Tobacco worm, or moth. horn blower. Ag. Rep. 1870, p. 153. figs. 5-6-7.

L. injures fls of Tobacco. Potato Tomato. Red pepper &c. The caterpillars are
destroyed by a parasitic *Hymenoptera* insect. *Microgaster congregata*, which forms
a small egg like white cocoon, on the outer skin of the caterpillar many of
these egg like cocoons emerging from one caterpillar & form a very singular appearance
as they adhere to the dying caterpillar. *Macroscia Carolina*. *IS. III/6* *IS. IX/2*. (Hym)
(Syn. also *Sphinx*) mere mention 1874 p. 129. (Lep)

Macroscia (*Sphinx*) *quinquemaculata*. (Clem. Hb) Tomato. or potato worm. Ag. Rep. 1870, p. 80.

L. feeds on Tobacco potato & tomato fls. habit same as above common in
the northern states, whilst *M. Carolina*, is more common in the south. both however
are found in Maryland. in the tobacco fields 1870 p. 80 - fig. 39. The popular, alluding
is to their being able to inflict a severe wound with the horn on the hinder end.
of their body, or of poisoning persons, denied. L. probably destroyed by *Microgaster*,
congregata, mentioned above & by a parasitic *Hymenoptera* which forms a
larva out of loose wooly cocoons. (*IS. IX/18* Hym) Ag. Rep. 1873, p. 159. — 1874, p. 80.

Macroscia quinquemaculata. (Clem) *IS. IX/15* *IS. IX/6*. (Lep) *J. Glover*

- Malachidae. (Col) frequent flowers, & feed on other insects. Ag. Rep. 1862, p. 96. (Col)
- Malachius aeneus. (Col) (Eu) destroys grubs in the stems of plants. Ag. Rep. 1865, p. 91. (Col)
- Mallodon. ? (Col) Ag. Rep. Rathvon. 1861 p. 812. more mention. Exemul. Mallodon d. 41. . .
 { SS. XVIII/10. (Col)
- Maise. plate, showing the oil starch. gluten. &c. Ag. Rep. 1863. p. 100.
- Mallophaga. (Orth) Tasting Bird lice. (miscalled by some "Ticks") on various Birds and animals.
 { feed on feathers, hair, skin, scales, &c. mammals, &c. Ag. Rep. 1874 p. 146. 150. &c.
 { example Nimius angulus. SS. XII/1. (Orth).
- Mammology & ornithology of New England. &c. Ed. Sumner. Ag. Rep. 1863. p. 265.
- Manna. produced by the punctures of a cicada on the flowering ash. Ag. Rep. 1866 p. 38. (Horn)
- Mantidae. (Orth) Praying Mantis. Camel crickets, praying Mantids. feed entirely on other insects.
 { Ag. Rep. 1863. p. 275. — 1874 p. 130.
- Mantis carolina (Orth). Ag. Rep. 1854 p. 58 p. 8. "Bear horse" "Boothsayer" &c. destroys other insects.
 { Ag. Rep. 1854 p. 58 p. 8. — (Rathvon Ag. Rep. 1862 p. 376. 18. 8. 9. 10 p. 109)
 { upon each other when young — 1864 p. 234. — 1866 p. 40. & 1874 p. 188. habits nat. Hist.
 { SS. 11/11 (Orth) (see also 1863 p. 275)
- May Beetle (U.S. Col) see Phyllophaga, Lachnosterna, Diphlosaris. (Col)
- " " (Eu Col) or cockchafer. (Hornet French) see Melolontha (Col) Ag. Rep. 1865 p. 89.
- " " (Rathvon) Ag. Rep. Phyllophaga, que-nia Lusa. SS. VII/5 " 264 20. (Col.)
- May fly Ephemeridae (New) Palingema. (Ephemera). Umbala. appear in Washington D. C.
 { about May & June. sometimes in great numbers. important in medicinal snail pest.
 { by the Fishermen. SS. V/5 (New) (Ag. Rep. 1866 p. 309.)
- Meal worms. The larvae of Tenebrio. Tenebrionidae. monitor. &c. destroy meal, flour, &c.
 { but form a very good food for soft belled birds, such as Mocking birds &c. remedies 1869.
 { SS. 13/3 Larva & SS. XXV/15. (Col)
- Measuring worms. (New York) Ag. Rep. 1854 Exomosa. subsignaria. Ag. Rep. 1864 p. 554. injures foliage of Elm, poplar, Linden, & other trees. SS. XVIII/16 (Sep)
- Medal gold. at Ent. Exhibition in Paris, awarded to SS. 1865. p. 101. Ag. Rep.
- Mezophala. carolina. Tiger beetle. (Col) destroys other insects. the larvae live in holes in the ground. (Cecidela) Ag. Rep. 1854 p. 87, pl. 8. — 1855. p. 109. pl. 8 fig. 1. — 1876. p. 65.
 { fig. 1. see Nictacha. SS. 12/1 (Col)
- Megascotis. (Perichneata) diffingens. Japanese. cane worm important with some Japanese plants. Ag. Rep. 1871 p. 52.
- Melanactes. ? (Col) Larva luminosa (From So. Car.) Ag. Rep. 1873. p. 162. fig. 10. example
 { Melanactes morio. SS. XI/20. (Col)
- Melanogrydidae. Ag. Rep. 1865. p. 103 (Col) Melanogryini. (Col) Under bark. Ag. Rep. 1863 p. 101. (Col)
- Melanogry. umbrosa. (Col) in rotten Oak stumps. Ag. Rep. 1863 p. 101. (Col)
- Melanogry. (Perichneata) lucida. (Col) destroys other insects. Ag. Rep. 1872 p. 130. fig. 12. Melanogry
 { SS. IX/1. (Col)
- Melanolus (Cratonychus) communis. (Col) L in rotten wood, also feeds on vegetable roots. Ag. Rep. 1868 p. 94. fig. 114. SS. X/4 (Col)
- Melanophila (Chrysobothris) fulvopunctata. (Col) L. probably feeds on white pine. Ag. Rep. 1868 p. 94. fig. 116. Melanophila SS. XI/9. (Col)
- Media ardentia. (New) Fruit of India or China — the berries are mentioned as a cure for bats in houses, & L. destroys insects. Ag. Rep. 1872 p. 131.
- Meloidae. phaeon. (Sep) L feeds on Arrow wood. (Viburnum) "Baltimore fritillary"
 { Ag. Rep. 1867. p. 77. SS. P. XXII/6. SS. XXX/10 (Sep)
- Meise angusticornis. (Col) L feeds on Strophosiphon & Violata the larvae are parasitic on the bodies of Wasps, bees, & flies Syrphidae & Muscaria Ag. Rep. 1868 p. 102. fig. 177.
 { SS. XXXVII/22 (Col)
- Meloidae. Plaster flies ? (Col) more mention. Ag. Rep. 1865 p. 102. (Col)

- Melolontha*. (Col.) Ag^t Report 1861. p. 590. (Rathvon) destructive to roots, in the larva state
 { to fruit & foliage as perfect insects. Larvae destroyed by *Cicindellidae*. larvae.
 Ag Rep. 1861. p. 590. (Col) *variolosa* (Col) see below.
- x *Melolontha variolosa* (Polyphagella) (Scarabaeid) I destroy foliage of Elm maps
 { Oak apple plum & other fruit forest trees. Ag Rep 1868 p. 88 see *Macronoxia*
 JG VII/18 (Col)
- Melolontha vulgaris* (Sw) (Col) Cockchafer of Europe. I feed on roots. Ins on foliage of trees.
 { Shrubs. Ag. Rep. 1868. p. 88. — damage done in Picardy 1869 p. 632. (Col)
Melolontha (Col) (Rathvon) Ag rep. 1861. p. 590. I destroyed by S of *Cicindella*. (Col)
- Melolonthidae* (Col) feed on vegetable matter. Ag Rep. 1868 p. 87. (Col)
- Melophagus ovinus* (Linn) sheep tick, or louse fly. with remedies. Ag. Rep. 1872. p. 133. fig 26.
 JG. VI/45 (Linn)
- Membracidae*. (Hom) Ag. Rep. 1868. p. 315. —
- Membracis* (Hom) (Rathvon) Ag Rep. 1862. p. 387. resembles *Tetonia* (Orth) when young. Forms
 { a connecting link between Orth. & Homopt? (Rathvon)
- Membracis benecata*. frequents Butternut, hop tree. Locust. V-weeds. Ag. Rep. 1876. fig 11.
 see *Enchenopa*. JG. 1/22 (Hom)
- Membracis carinata* (Hom) frequents the potato plants. Ag^t Rep. 1876. fig 14. see *Entilia*.
 JG. 1/26. (Hom)
- Membracis concava*. (Hom) frequents weeds. Ag^t Rep^t 1876. fig 13. see *Entilia*. JG. 1/1. (Hom)
- Membracis innervata* (Hom) frequent Oak & Chestnut Ag Rep 1876 fig 18 see *Smilia* JG 11/26 (Hom)
- Membracis parallela* (Hom) frequents white pines & covers itself with a froth like liquid. by some
 { called frog spittle. Ag Rep. 1876. fig 26. see *Aphrophora*. JG. 1/34. (Hom) see *Aphrophora*. JG 11/33 (Horn)
- Membracis quadrimaculata* (Hom) frequents white pines as above Ag Rep 1876 p. 27. JG 11/33 (Horn)
- x *Membracis rava*. (Hom) frequents Hickory, walnut Oak. Ag Rep 1876 fig 20. see *Smilia* 11/31. Horn
- Metaphodus femoratus*. see *Acanthophaea*. (Holt) JG. 1/20. (Holt)
- Microgaster congregata* (Horn) a minute parasitic four winged fly. destroying the tobacco and
 { potato caterpillars. The parent fly deposits a great number of eggs in or on the
 caterpillars of *Macrosia cardaria*. or *M. quinque maculata*. the larvae hatched from
 these eggs penetrate into the caterpillar & eat out the fatty parts without destroying
 its life. they then eat holes through the skin. Horn small egg shaped white
 cocoons, on the outside of the dying caterpillar & finally emerge as perfect minute
 flies, again to lay eggs in other caterpillars They are however themselves destroyed
 by another minute parasitic fly. *Pteromalus tabacum*. Ag Rep 1873 p. 158. *Microgaster*
 JG. 4/22. (Horn)
- Michener*. Ob. Ag^t Ornithology Ag Rep. 1863. p. 287. 307.
- Microcentrum retinervis* (Orth) Linn. injure the foliage of Orange trees. Ag. Rep 1858. p. 275.
 JG. IV/3. 16. (Orth)
- Microphus*. *Phytanochromus*. (Blissus) 'devastator'. *leucopterus*. *Chincho* bug. (Holt) injures vegetables
 { grass. maize. Grass. Wheat. Oats. potatoes, sorghum, buds of Pear &c. — Ag. Rep.
 1864. p. 533. remedies. — 1869 p. 537. — 1870. p. 57. 59. — 1874 p. 127. localities
 injured. — 1875 p. 122 fig 26. substances injured. see *Phisus* *Microphus leucopterus*.
 JG. 11/16. 17. (Holt)
- Midas*. *filatus* (Linn) feeds on other insects. Ag Rep. 1866. p. 44. Ex *Midas clavatus* JG. 11/20 (Linn)
- Migratory Locusts*. of the U.S. see *Caloptenus spretus*. ? & *Eddipoda atrox*. (Orth)
 { of E. Asia & Africa *Acridum peregrinum*. *A. tartaricum*. & *Eddipoda*
 { *migratoria*. (Orth)
- Midges*. see *Simulidae*. Ag. Rep. 1872. p. 126. (Linn)
- Milyas* (Hemiptera) *enclatus*. (Holt) destroys other insects. *Doryphora* (*Chrysomela*) *decum*.
 { *enclata*. Apple. Tortrix. F. &c. —
 JG. *Milyas enclatus*. 11/12 (Holt)
- x *Miniporis*. *graminiscola*. (Horn) destroys Calandra (*Sitophilus*) *oryzae*. Ag. Rep. 1849 p. 332. 1866
 JG.

Minke, business. by Swanton, Tennessee. Ag Rep 1869 p 429.

Minke, Treasuries & profits of mining, by H. Rossignol. Ag Rep 1873, p 653.

Mite causing scab on sheep. Ag Rep. 1864 p 563. remedies, &c.

Mite, red spider, on plants. (see *Acarus tetranychus* & *Bimaculus* reports. Ag Rep. 1871 p 109. (on *Ligustrum*)

{ — remedy. Ag Rep. 1864 p 564.

Mites on Grasshoppers — *Attonia locustarum*. Ag Rep. 1867 p 67. — 1874 p 138. as *Acarus*

{ *Latius* (Ag Rep. 1862 p 389.

Mites on Macrochorus (Col) see *Gamasus*. (Coleopterorum?) Ag Rep. 1868 p 82.

Mite of the Pear. see *Tetranychus pyri* injures leaf on the pear. Ag Rep. 1872 p 113, fig 2.

Mite infesting cane fly *Spizella cinerea* (Eu) see *Cyphote rubra*. Ag Rep 1872 p 126.

" " common fly. *Automa urachnides*? Am Ent 1.249. Ag Rep 0. — & *Urophoda*

Mosha Stone mite. (Std. Lep) see *Anthura incusa* *Clasera americana*. L. fies on Poplar.

{ *Quasio*. (Poplar spawner) Ag Rep. 1864 p 555. *Scythura involsa*. SS. I. vii/13. Ins. LVII/3. (Std.)

Mosquitos. final exhibition at the Paris exposition Ag Rep. 1865 p 92. (13 Cases)

Mole crickets. (Orth). see *Gryllotalpa*. Remedies. Ag Rep. 1864 p 543. Orth. SS. vii/13. (Orth)

Molobrus mali, "apple worm or midge", see *Sciara mali* (Std.) I found in apples, injured by

{ the cotton mite. *Caryocapsa pomonella*. Ag Rep. 1872 p 166.

Monochamus dentator, *tettulator* (Col) *Labling* beetle. (Rathvon) Ag Rep. 1861 p 613. L. feed.

{ on wood of pine. SS. xiv/1. (Col)

Monotomidae. (Col) mere mention. Ag Rep. 1868 p 83. (Col)

Mordellidae. (Col) m. m. Ag Rep. 1863 p 101. (Col)

Mordella, *setipunctata* (Col) requires flowers. Ag Rep. 1868 p 101. fig. 174. SS. xxx/14. (Col)

Mordella fusella. (Eu) (Col) found in stems of horehound, (*Marrubium vulgare*). Ag Rep. 1868 p 101 (Col)

→ *Morris*. Dr. J. G. Baltimore. *Acanthus* silk worm. *Samia cynthia* (Std.) Introduction

{ habits, culture, experiments. Ag. Rep 1861 p 874, 382. additional observations &c

{ with figures 1862 p 390. *Samia cynthia*. SS. LFC. xxi/5. Ixvii/5. (Lep.) (Bombyx Syn)

x *Mormidae* *Abalis typhaeus* (Ht) accused of having upon ears of wheat but probably feed

{ on the wheat midge. (*Diplosis tritici*) *Oebalus* SS. ii/7. (Std)

Mosquito, or Midge, see *Culex citratus*. &c SS. LFC. viii/1. Ins. i/1 (sometimes *Moscheto*)

Mosquito. hawk. (New). *Libellula* or dragon fly. LPS predaceous. (New) Ag Rep. 1864 p 545.

→ Mite the chrysalis of a mite was destroyed by an Anthrax Ag Rep 1866 p 44 SS. iii/11. (Std.)

Mormididae (Col) one species said to live in old rice. Ag Rep 1868 p 83 (Col)

Mormidus, *ovalis*, (Eu) Col found in grain (rice) Ag Rep. 1868 p 114. Col

Musca caesar, (Dip.) Carrion & flesh. remedies. Ag Rep 1864 p 563. — found in stomach

{ of wood pewee. 1865 p 39. (Std.) SS. Lucina IV/20. (Std)

Musca cornuta — (Lep.) I feed on excreta &c Ag Rep. 1866 p 29.

Musca domestica, common house fly. Ag Rep 1864 p 563. — 1872 p 131 habits, remedies, &c

{ SS. I/23. (Std.)

x *Murgantia*. (*Strachia*) *histrionica*. injures cabbage. *Samia*. & other vegetables. I & steel

{ destroyed by *Aspilota glauca* *phyllosus*. *Cataglyphis*. *Harlequin* cabbage bug. &c also

{ *Strachia*. (Lep. 1867 p 71. &c. *Murgantia*. *Strachia* *histrionica*. SS. II/22. (Std.)

Musidae Dip. Ag Rep 1863 p 102. 304 &c &c. (Std)

Museum, *Agricultural*. short rest of plan &c Ag Rep. 1863 p 261.

" " Report of progress. &c Ag Rep. 1864 p 540.

" " Ag Report 1865 p 3. 33. 94. specimens. 1865 p 24

" " Plan of Agricultural & Economic. Pers. Ag Rep. 1865 p 94.

" " of Department of Agricultural. 1866. 10. 27.

" " Short recapitulation. of plan. 1867. p. 76.

" " contents &c & removal. 1868/10.

Mycetobia. *Mycetophila penicillata* (Lep) *Phac. mycetobia*. &c. found in heron's pieced with grass. &c

{ gum, made by *Algonia exilis*, on the peach tree lower. Lep. Ag Rep. 1872 p 115, fig 4.

{ SS. xii/13. (Std.)

Salmon

Mycetobia, (Dipr.) feed on Fungi, one mentioned by Dr Packard. feed in prutiscent sap: under
{bark of Elm. Ag. Rep. 1872, p. 115. (Dipr.)

Mycetophagidae, (Col.) fungi, under bark, mere mention. Ag. Rep. 1868. 3d. (Dipr.)

Mycetophilus persicivorus (Dipr.) see *Mycetobia* Ag. Rep. 1872, p. 115. fig. 4. (Dipr.) IS. XI. 13.

Myelophilidae, (Dipr.) 1868, p. 317.

Mylabris, (Brachy. test) latest name for *Bruchus pisi*. Ag. Rep. 1869 p. 338. 1863, p. 374. 4th 9th. for
{habits, remedies see *Bruchus*. *Mylabris pisi*, IS. XIV/6. (Col)

Mylabris sinuata, (Col) Field bean. Ag. Rep. 1870. *Mylabris*, *Bruchus sinuatus* IS. XIV/7. (Col)

Mylabris granarius, (Col) Destroyer peas, beans &c. Ag. Rep. 1869 p. 340. 1870, p. 71. *Mylabris*, *Bruchus*
{*granarius*, IS. XIV/12. (Col) (a field bean. Ag. Rep. 1870, p. 72.)

Mylabris varicornis, (Col) a field bean Ag. Rep. 1870, p. 72. *Mylabris*, *Bruchus varicornis*. IS. XIV/11. (Col)

Mycetoridæ, (Col) mere mention. Ag. Rep. 1868, p. 104. (Col.)

Myrmecodon, (Hym) Ant lion. Ag. Rep. 1855 p. 107. I dig pit/falls to entrap other insects, on which
{they feed, — 1864, p. 545. (Hym) ex. IS. V/16. (Hym)

Mysia (Coccinella), 10, punctate, Ag. Rep. 1864, p. 65. It 8 destroys Cotton aphids. See *Anatis*.
{IS. XXV/3. (Col)

Nabis (Het.) feed on other insects. Ag. Rep. 1866, p. 44.

Nabis varius, (Het.) destroys other insects. Ag. Rep. 1875, p. 130, fig. 4. See *Stammator*, IS. III/5. (Het.)
Nacodes melanura, (Coccinella) *apicalis*? (Col) See frequently former. Ag. Rep. 1868, p. 102. fig. 15.

{IS. XXVII/19. (Col)

Nauconis, (Het.) aquatic, & destroys insects. Ag. Rep. 1875, p. 132, fig. 56. IS. V. 3. VIII. 36. (Het.)

Nasutibius (*Silvanus*) *denticulatus*, (Col) I. found under bark of trees. II on sugar. Ag. Rep. 1868, p. 64
{IS. VI/23. (Col)

Naval ship timber beetle, (Col) *Synsylon navale*. I. injures wood. Ag. rep. 1868, p. 93, IS. XXIII/9. (Col)

Necrobia (Col) feed on animal matter, carrion &c. see also *Corynetes* (Col) Ag. Rep. 1866, p. 97. (Col)

Necrobia, *villosa*, (Col) predaceous eat dried meat carrion &c. Ag. Rep. 1868, p. 97, fig. 143.
{see *Corynetes*, IS. XI/32. (Col)

Necrodes, *summatensis*, (Col) (Rathvon) Ag. Rep. 1861, p. 595. fig. 16. feed on Carrion putrid. Fungus &c.
{see *Peltis* IS. IV/13. (Col)

Necrophila, *helata*, (Americana), feed on Carrion. Ag. Rep. 1865, p. 52, fig. 12. (Americana) as *Peltis*.
{*Americana* IS. IV/11. (Col)

Necrophila, (Col) see *Silpha* also Ag. Rep. (Rathvon) 1861 p. 595 (Col)

Necrophorus tomentosus (Rathv.) Ag. Rep. 1861 p. 595. fig. 15. 14. 15. eat small dead carcasses.

{Common & resembles *Silpha* (*Necrophorus*) *velutinus*, IS. IV/18. (Col)

Necrophorus? (Col) burying beetle. (Rathvon) Ag. Rep. 1861, p. 595. — 1862, p. 380, (Col)

Necrophorus (Col) useful as removing Carrion Ag. Rep. 1866 p. 39. Fact as scavenger. (Col)

Necrophorus americanus, (Col) feed on carrion, especially on dead snails. Ag. Rep. 1861, p. 380.
{It is infested with a mite (*Samates*) see *Silpha americana*. IS. IV/15. (Col)

Necrophorus marginalis, (Col) feeds on carrion Ag. Rep. 1868, p. 102, fig. 17. IS. IV/15. (Col)

Necites (*Berytus*) *elagans*, (E. H. H.) found on Rat harbour "Ornithoglossus". Ag. Rep. 1875, p. 121. (Het.)

Necites (*Berytus*) *apicatus*, (E. H. H.) Ag. Rep. 1875, p. 121. common on sand at roots of plants.

Nematus, *umbellatus*, Say. Black willow saw fly Ag. Rep. 1873, p. 230. worms when young destroy
{with a row of 12 yellow spots on each side when adult. Heliothone recommended to
{destroy them. (Hym)

Nematus undulatus, (Hym) Imported "Carrion worm" or Saw fly I. injures currant & raspberry
{foliage. color of worm. green. spotted with black. habits, remedies &c. Ag. Rep.
{1870, p. 77, fig. 33. (Hym)

Nemobius, (*Acheta*) *ultratus*. Striped cricket. (Rathvon) Ag. Rep. 1862, p. 381. feeds on
{vegetables, Carrion &c. IS. III/9. 10. (Orth)

Nemognathus atridens see *Trichia* (Col) taken on flowers. Ag. Rep. 1865, p. 102, fig. 25. The female
{of common species on flowers one said to inhabit ants' nests, on growing. IS. IX/25. (Col)
IS. IX/25. (Col)

Pepa articulata (Hbst.) water scorpion. I. carnivorous, & destroys other insects, "Ag Rep."
 {1875 p. 133, p. 57. SS. V/10. (Hbst.)

Net. double insect net. for sweeping grass, Hushes, described. Ag Rep., 1863, p. 577. —
 {double scoop net & insect trap described, figured, 1867, p. 64. — double, net 1874.
 p. 160, fig. 11. —

Newspaper. Ag Rep 1864, 545. 1866, p. 40. net veined insects.

New York, measuring worm, see *Gonomus subsignarius*, Ag Rep., 1864, p. 552, I feed on Elm.
 {particular, & London. SS. L.P. XVIII/6. (Lep.)

New York weevil. see *Styliscus novaeboracensis*, *curculionoides* Ag Rep 1860, p. 321.
 {1861, p. 604, fig. 40. & 82. see *Styliscus novaeboracensis*, SS. VII/13. (Col)

Nerara (*Rhaphigaster*) *pennsylvanica* (Hbst.) green plant bug of N.Y. on Cotton Ag Rep 1855
 {p. 93, p. 118. fig. 5. — SS. IX/4. (Hbst.) (also later *Nerara hilaris*)

Nerara hilaris (*Rhaphigaster pennsylvanicus*) of Fitch. Ag Rep 1875, p. 11. fig. 5. *Nerara hilaris*
 {SS. IX/4. (Hbst.)

Nin. a grease produced by an insect, bearing the same generic name, from Yucatan.
 {Dr Arthur Schott. Ag Rep., 1868. p. 268.

Nitidulidae (*Nitidulina*, Col) feed on decomposing animal & vegetable substances. & found in
 {flowers. Jungi, & Ag Rep 1868, p. 83. example, *Nitidula ochustulata*. SS. VI/24. (Col)

Noctua *Anomis xylinae* Cotton caterpillar or moth. injures Buds of the Cotton plant Ag Rep
 {1855, p. 71, pl. VI fig. 5. 1856, p. 244. — in "article of cotton by free labor" by M. D. Landon
 the wood cut of *Anomis xylinae* is wrong, having been copied from another insect
 in the Report for 1855, pl. VIII fig. 4. Landon's Report in Ag Rep 1864 p. 88-90.
Noctua anomis xylinae is now *Alstia angulata*. SS. XXVII/4. (Lep.)

Noctuidae. Lep. Ag Rep 1862 p. 459. Lep.

Notonecta *insulata* (Hbst.) "water boatman" destroys insects. Ag Rep., 1875, p. 136, fig. 62.
 {SS. VI/4. (Hbst.) 4, *Notonectidae* 1868 p. 315.

Notonecta *irrorata* Hbst. "water boatman" destroys insects Ag Rep 1870, p. 136, fig. 63

Notonecta monodon (Col) frequents Cotton flowers Ag rep 1868 p. 101 fig. 172. SS. XXVII/23. (Col)

Notonectini Form 7. Hbst. Ag Rep 1875, p. 127. Hbst.

Notus raphanus destrutor (Hbst) sucks sap of Rashes, mustard, Gallus, cabbage, cruciferous
 {plants, grape potato, & Ag Rep. 1875. p. 122. fig. 25. SS. VII/9. (Hbst)

Oak. small horn bug see *Platycerus quercus*. Ag Rep 1870, p. 66. SS. X/9. (Col)

Oak horn bug. Large. Col. see *Lucanus darce*. Ag Rep 1861 p. 548 fig. 28, 29, 30 SS. X/16. (Col)

Oak pruner. *Stenocorus putator* (Col) *Elaphidion villosum*. Ag rep 1863 p. 575 remedies &
 {cuts off twigs from the inside of Oak apple peach hickory chestnut &

{*Elaphidion villosum*, SS. X/13. Col. (compare with *oncidens*, *angulatus* which cuts off buds
 of Pear Hickory & from the outside hence called the Twig girdler see *Oncidens angulatus*.)

Olema linearis (Col) (Eu) I feed in the pits of small branches of Hearn's & Filbert. Ag Rep.
 {1865 p. 89. (Col)

Olema tripunctata (Col) Raspberry borer. I. loves in holes of Raspberry. Blackberry, &
 Ag Rep 1863 p. 576. — 1865 p. 89. & 1870 69. SS. XIV/4. (Col)

Oblique-banded rose moth. or Tortrix. I. destroy the foliage of Roses. rolling themselves up in
 {a bud or leaves, or tying them together to form a shelter. see *Protaenia rosaceana*.
SS. XII/13. SS. XVI/4. SS. IV/20 & LXIV/6, 8, 10. (Lep.)

Oxyptis, subra, a moth infesting. *Tipula obscura* (Eu) crane fly, or Daddy long legs Ag Rep.
 {1872 p. 128.

Odontomyx (*Dasys*) *trivittis* (Col) mere mention Ag Rep 1868 p. 94 fig. 118. *Odontomyx*.
 {*trivittis* SS. XX/17. (Col)

Oebalus *typhaeus*, *pugna*. (Hbst) said to injure Wheat? Ag Rep 1867 p. 71. (Syn *Mormelus*)
 {figured p. 71 SS. III/7. (Hbst) *Oebalus*.

- Acuminatus* *niveus* (Orth.) Ag. Rep. (Rathvon) 1862, p. 381, fig. 17, 18. White climbing. In crevices. Ins. pierces holes & deposits eggs in Peach trees. B eats holes in foliage of grapes, and
Solms 4. — 1874, 183, fig. 16. Emits. injures. & punctures branches. of Apples.
Blackberry cherry. currant. grape. peach plum. pear raspberry. ligustrum grapes &c
 but at the same time they are said to destroy plant lice & other insects. *IS. IV/12* Orth.
- Acuteus* (scholasticus) *conferum* (Lep.) injures foliage of Cotton. also. Anconites, Larch, Linden.
Hemlock. Maple. Magnolia. &c — 1866, p. 502. Resket, or bark worm. injures *Eulans*.
Premedies — 1866, p. 41. ex *Thuridopteryx ephemerae formis*. *IS. XII/1 to 5* (Lep.).
- Adonere-luc.* Ant. frequent unident. on plants. Ag. Rep. 1866, p. 103. (Col.)
- Adonere-luc. aricalis*, see *Nacortes melanura* (Col.) Ins. taken on flowers. Ag. Rep., 1868, p. 103.
IS. XXVII/9 (Col.).
- Adonere-luc. atrox* (Orth.) Migratory locust (or grasshopper) of the Pacific coast. Ag. Rep. 1871, p. 77, fig. 10.
 injures vegetation in orchards, gardens, vineyards, grown fields. *IS. — 1874, 137, fig. 10.*
 "Terrible grasshopper" of Calif. Oregon. west of Rocky Mtns. Full account.
IS. VIII/3 (Orth.) "note from Thomas list of Orthopt. in Br. Leavenport Acad. nat. Sc. 1876.
Commula. Adipoda pellucida is said to be a synonym of *Adipoda atrox*, I thought not to be the
 destructive migratory species of California. "Leavenport list of Orthoptera. Thomas, p. 253"
- Adipoda* (Cammula) *pellucida* Scud. (Orth.) resembles *A. atrox* said to be the migratory locust
 of the Pacific coast. Ag. Rep. 1871, p. 78 *Adipoda. Cammula pellucida* *IS. XII/20* (Orth.)
- Obscurus* (Lep.) skin bot fly producing warbles or wormholes in the skin of cattle
 I live in holes under the skin of cattle feed upon the pus or matter produced
 in the tumor. remedies Ag. Rep. 1864, p. 503. see *Hypodermia bouis* *IS. VIII/21* VII/86.
 " ? Head fly of Texas. *IS. XI/37* (Lep.) (see also 1872, p. 130 fig. 18) (*Obscurus* 1866 p. 317.)
- Oestus* (*Cephalomyia*) *ovis* (Lep.) Shear head bot. L. ex *tronta serus* & others. remedy. Ag. Rep.
 1864, p. 503. & 1872, p. 129. *Cephalomyia ovis*. *IS. VII/36* Lep.
- Oiketicus* *Oecleus confusus* (Lep.) Ag. Rep. 1868, p. 264. injures foliage of Orange. — 1860
 { p. 503 Ins on Cotton. (Chambers) with a rough figure. see *Thuridopteryx ephemerae*
formis *IS. XII/1 to 5* (Lep.).
- Oil beetle. in Mexico. *examinis*. *IS. XXXVII/22*. Ag. Rep. 1866, p. 102. fig. 17. (Col.)
- Olanus*. ? n. sp. (Hom.) frequent Blackberry bushes. Ag. Rep. 1876, p. 77. *IS. VI/4* 18. 4 m.
- Omaloplex* see *Soraca*. Col. ex. *Omaloplex soraca neopolitana* *IS. VI/17* (Col.)
- Omasus* (Col. ex.) Ag. Rep. 1865, p. 91 destroys other insects. (Col.)
- Omphron. tabiatum*. Col. destroys young mice. Ag. Rep. 1866, p. 79. fig. 2. *IS. XXX/9* Col.
- Oncideres. angulatus* (Col.) Twig girdler. Ins. girdles twigs of Pear. Deciduous. Ketchikan. T. m.
 { walnut. & Apple trees. Ag. Rep. 1867, p. 72. 1871, 72. — girdles twig before depositing egg.
 1873 p. 103. *IS. XXII/20* (Col.)
- Onion* flies (Lep.) see *Anthomyia ceporum* of the East, & *Orthia flexa* of the western states, Ag. Rep.
IS. VII/33 VII/18. & VIII/23.
- Onion* fly. *Anthomyia ceporum*. Ag. Rep. 1866, p. 23. (Lep.) *IS. VII/33* VIII/18. Lp. (see also 1867 p. 738 1869 227.)
- " { *Orthia flexa* Ag. Rep. 1866, p. 503. — 1872, p. 134 fig. 24. (Lep.) *IS. VIII/28* Lep.
- Oology of some land birds of New England. & means of identifying injurious, & beneficial species.
 Ag. Rep. 1864, p. 386.
- Ophiom. macrumum* (Hym.) or Schneumon fly. destroying *Ottacus* (Samsa) *Cecropia* (Lep.) Ag. Rep.
 1866, p. 41. *IS. XIII/6* (Hym.)
- Ophthalmicus*. (Col.) from a pear feeder. Ag. Rep. 1875, p. 122, fig. 24. *IS. Ophthalmicus piceus* III/2 (Col.)
- Ophidius molleis* (Col.) Ex. destroys L. of wood eating insects. Ag. Rep. 1863, p. 91. Col.
- Ophiomela* (*Glomula* Thomas) (Rathvon) Ag. Rep. 1862, p. 384 m. m. ex. *Ophiomela. leucitella*. *IS.*
 VI/24. (Orth.)
- + *Ophiom. bimaculatus* (Hym.) Ag. Rep. 1866, p. 41. (Hym.)
- x *Ophiomela migratoria* (Orth.) see *Proctotrupes migratorius*. *IS. XIV/10* Orth.

- Orange Aphid. or Plant louse, (Hom.) Ag. Rep. 1858, p. 261. (Hom.)
- Orange Bark louse, or Scale insect, (Hom.) Coccus. Ag. Rep. 1855, p. 115, fig. X, fig. 8, injures bark & foliage of Orange trees. Ag. Rep. 1858, p. 256 — 1864, p. 561 remedies — 1865, p. 91
 { coccus destroyed by *Brachionus quercus* (coccinella) see *Aspidictus Goweri* SS p. 14, (Hom)
- Orange tree, basket worm, or tree worm, det. *Diplos confederata*, see also *Acetia* *Platanidicus*
 { *glauca* (Pack.) Ag. Rep. 1858, p. 262. *Diplos confederata*, SS p. 11, 18, SS p. 14, 26 (Dep.)
- Orange insects, experiments on in Florida, & talkin' on success in destruction of Coccus
 { *Aspidictus Goweri*, from W. H. Morrison & Judge Townsend of Palatka Fla.
 { Ag. Rep. 1858, p. 256, 257, Morrison & Judge Townsend (1864, p. 570, Judge Townsend)
- Orange tree, remains on the Orange tree, as J. Fowler, taken principally from Michaux.
 { 1858, p. 266.
- Orange lined *Bagrada* (Det.) on *Bagrada* *linearis*, I feed on tender shoots of pines, I probably
 { feeds on wood. Ag. Rep. 1864, p. 571. *Bagrada linearis* SS p. 13. (Det.)
- Orchidomum. ? injures cotton by boring into stalk in which to deposit eggs. Ag. Rep. 1867, p. 61.
 { figured. (Orth.)
- Orchidomum, *gracile* (Orth.) Ag. Rep. (Rathvon) 1862, p. 352, fig. 22, cut green, hairy, see, *Xyphodermis*
 { *assuetum* SS p. 10. (Orth.)
- Orchidomum, *nigra* (Orth.) (Rathvon) Ag. Rep. 1862, p. 352, fig. 23, cut green, hairy, see, *Xyphodermis*
 { *agris*. *Slender meadow grasshopper*. SS p. 10. (Orth.)
- * Orchidomum, *nigra*, as fig. in Ag. Rep. 1874, p. 164, fig. 13, is wrong as it is the figure of *Scutellaria hexanervis*
 { see SS p. 16. (Orth.) put in by mistake.
- Orchidomum, (Holl.) & *Phyllocha*, *striolata*, Col. *Scutellaria*, *calycis* *strigosa* *impendens*, Cabbage, &c.
 { Ag. Rep. 1865, p. 282. see *Orchidomum striolata*. SS p. 18 (Col)
- Orgyia, *laevigata* (Dep.) *Grasshopper* Ag. Rep. 1864, p. 552, fig. 1, *Grasshopper* has remedies —
 { — is destroyed by a parasitic *Hymenoptera* *Trichogramma* *orgyiae*. 1864, p. 52.
 { *Orgyia*. SS p. 10, 11, 19, 21, 26. (Det.)
- Oriental, *Coccinella* (Orth.) see *Platanus* (Rathvon) *Coccinella*. 1862, p. 374. *Stylis*, p. 3, *interior*. 1874.
 { p. 10, fig. 1 *Stylis* SS p. 15, 16, VII/2. (Orth.)
- Ormenis, (Pectopleria) *septentrionalis*, (Hom.) found on grass, & *Podophyllum* (May apple)
 { Ag. Rep. 1876, fig. 9. SS p. 145. (Hom)
- Ornithogalum, *Agrostoides*, by W. Michener, Pa. Ag. Rep. 1863, p. 257, to 307.
 { " " of New England by E. A. Samuels. Ag. Rep. 1863, p. 265.
- Ornithogalum, report, notes of contents of stomachs, with insect, named, but not catalogued.
 { Ag. Rep. 1865, p. 37.
- Ostiaidae, (Dep.) L. feed on fruit stems, & leaves of trees, & plants, Ag. Rep. 1872, p. 134.
 { *Ostia* *linearis*, *Trypeta arcuata* (Western onion fly) (Dep.) Ag. Rep. 1864, p. 563. remedies. —
 { 1872, p. 134, fig. 21. "habits & remedies." SS p. 18, 19 (for Eastern onion fly see
 { *Anthomyia ceporum* SS p. 18, 19, VII/18)
- Othoptera, *danicornis*, *Enophium thoracicum* (Col) Larva probably in word, Ag. Rep. 1868, p. 97, 142.
 { SS p. 11, 16. Col. *Othoptera*
- Othoptera, *Grasshoppers*, Locusts &c. 1864, p. 543. — 1866, p. 40. — 1868, p. 308. — 1871, p. 17. 1872, 127. 1874, 129.
 { " " Rathvon Ag. Rep. 1862, p. 372. as food for man. & remedies 1862, p. 389. 1864, p. 276
 { " " Remedies, &c. 1864, p. 543. one of the principal orders. History & general article. 1874.
 { p. 129.
- Othoptera, *ambulatoria* (Orth.) *walters*, as *Coccinella* & (Rathvon) 1862, p. 374.
 { *Othoptera*, *naptona* (Orth.) *graffers*, as *Manis* &c. " 376.
- Othoptera, *saltatoria* " *jumpers*, as *Grasshoppers*, &c. " p. 378.
- Othostethus, (Elater) *infusatus*, (Det.) I feed on Pinus wood. Ag. Rep. 1865, p. 94, fig. 1 SS p. 18. (Det.)
- Orange orange (*Maculera aurantifera*) is food for sick worms (Rathvon more) with experiments
 { by Mr. Connally. Ag. Rep. 1870, p. 82.
- Oscoris (Dep.) I feed on grain, wheat barley, &c. Ag. Rep. 1862, p. 134. Example *Oscoris granivorus* Europe
 { SS p. 18, 19, 3. Dep.

- Osmoderma crenicollis* (Col.) smooth *Osmoderma*. (Uhler.) Ag Rep. 1860 p. 320. Eats wood of
 { Apple trees. — also like Russia leather. — 1868 p. 90. I feeds on Sap of trees. Apple.
 { Cherry &c. IG. X/2. (Col.)
- Osmoderma scabra* (Col.) Rough *Osmoderma*. (Uhler.) Ag Rep. 1861 p. 391. Eat decayed wood of Apple.
 { As, feeds on foliage of Apple, Oak, Fruit, forest trees. Ins. emits a scent like Russia
 { leather. IG. X/3. (Col.)
- Othniidae*. see fam 67, p. 109. Crotch. Ag Rep. 1868, p. 94. (Col.)
- Otiocerus amyotii* (Hom.) 1876. no fig. I frequents Hickory. & Walnut. (Hom.)
- Otiocerus coquebortii* (Hom.) Ag Rep. 1876 fig 3. frequents wild grape Beech & oak. IG. 1/48 (Hom.)
- Butler bark louse, or Apple tree scale insect see *Heisteria conchiformis* (L. Rep. 1867 p. 94
 { 1870 p. 86 IG. 11/28 (Hom.)
- Pachys gigas* (Hes.) fm Arctima. Ag Rep. 1875. p. 122 fig. 15. IG. VII/36. VII/23. (Hes.)
- Pachymenus calibrator* (Hym.) destroys *Diplosis (Cecidomyia) tritici* the wheat midges. Ag Rep.
 { 1866 p. 42. (Hym.) IG. IX/9. (Hym.)
- Pachytelus migratorius* (Orth.) migratory Locust. of Europe. Also Sweden. Frankfurt &
 { *Adipia migratoria* of Smith's little dictionary. p. 353. *Pachytelus*. IG. XIV/10. (Orth.)
- Pacific coast. migratory Locust. see *Adipia* above. Ag Rep. 1874 17 fig 10. — 1874 p. 137 fig 10
 { IG. VIII/3. (Orth.)
- Palm weevil (Col.) *Rathron*. Ag Rep. 1861 p. 6p. *Calandra palmaseum* ? (Col.)
- Palm-leaf-pear or cedar weevil. see *Coryphæa arthuri* Ag Rep. 1870 p. 71. Eats out interior of
 { Seed. like the pear bug. IG. XXXIX/4 (Col.)
- Palm-leaf-pear weevil (Col.) I. feeds on substance of trunk, near the top of tree, or when cut down.
 { see *Phrynosoma (Lemmings)* *cruciatum* IG. XIII/21. (Col.)
- Pangus. *Harpalus caliginosus* (Col.) Ag Rep. 1868. Ins. injures wheat & grass seeds —
 { 1861 p. 592 *Rathron* Ag Rep. fig 9. hides under stones, &c — 1863 p. 466 probably feed
 { on wheat. — 1868 p. 80. *Harpalus caliginosus* IG. 1/9. (Col.)
- Papilio asterias. "Parsley worm." Lep. Ag Rep. 1864 p. 540 I. injures Celery, parsley, Parsnip.
 { cannot be umbelliferae in general. — remedies. — It is destroyed by *Ichneumon* IG.
 { *Proges exosius*. — IG. 1/18 (Hym.) — 1868 p. 314. — 1868 p. 119 fig 11. It is also destroyed
 { by *Stenobus geminatus* IG. 11/30. (Hes.) *Papilio asterias* IG. 3R/1/1 Ins. XXV/58. (Lep.)
- Papilio thor* *crispifrons* (Lep.) Ag Rep. 1858 p. 264 I. eat foliage of Orange & Prickly Ash
 { see *Papilio crispifrons* IG. 3R/3 p. 24. (Lep.)
- Parasitic insects destroying. *Chrysomela (Doryphora) 10 lineata*. full Est see Ag Rep. 1874 p. 123.
- Papilionidae*. Ag Rep. 1868 p. 314.
- Parsons. on Italian bees. Ag Rep. 1857 p. 513.
- * Patent office. Ag Reports. end at 1861. (Rep. of Commissioner of Patents Reports of the
 { Commissioner of Agriculture, commences 1862. (very few insects mentioned until
 { 1884).
- Paris green (Arsenite of Copper) substitutes its effects. Ag Rep. 1871 p. 76. — efficacy. injurious
 { effects, mode of mixing &c for cotton. 1873 p. 163.
- Pans. entomological exhibition. Ag Rep. 1865. Aug. p. 88.
- Parnidae. (Col.) I frequent near water. Ag Rep. 1868 p. 80.
- Parsley or Celery worm (Lep.) see *Papilio asterias*. IG. 3R/1/1 Ins. XXV/58. (Lep.)
- Passalus cornutus* Col. (Rathron) Ag Rep. 1861 p. 599. fig 31, 32 I eat wood of old stumps especially
 { of black Oak — Dark wood 1868 p. 86 fig 53 IG. 3R/3 IG. XXI/10 Col.
- Passmachus elongatus* (Col.) destroys *Chrysomela (Doryphora) 10 lineata*. or the Colorado
 { potato beetle IG. Passmachus. XI/16. (Col.)
- Patent office. Ag Reports. see above & but place here.
- Pear bug. see *Bruchus Mylabris fici*. IG. XIV/6. (Col.)
- See yew. Caterpillar? or *IG. 3 Ag Rep. 1855 p. 85. fig 3 on Cotton is probably *Loxotaenia* IG.
 { *gossypii* — Lep. see on Cotton scales IG. 18/4. Lep. *Synacantha* (Horn) & *Gloss.*
 { *Loxotaenia gossypiana* Pack is on Cotton scales XI/2. (Lep.)*

Psach. araucaricus. (Col.) *Araucoccus coffea* (Col.) found under the bark of diseased peach trees
 { on the rolled & unrolled fruit. Ag. Rep. 1873. p. 114. fig 3. see *A. p. scutellatus*.
IS. XXXIX/21. (Col)

Peach tree borer. *Algebraia (Anobium) exitiosa*. L. injures bark, wood, or root, of Peach, injures
 { also Apricot, Cherry, nectarine, & plum. (Lep.) Ag. Rep. 1864. p. 550. Remedies. v.
IS. L. P. D. XLIII/2. (Lep)

Peach bud worm. (Lep.) I mines in the centre of twigs of Peach, killing the ends of the twigs.
 { on early summer. *Anarsia prunella* or *A. lineatella* Zellw. Ag. Rep. 1872 p. 112 fig. 1.
IS. L. P. D. CVIII/3. (Lep.)

Peach silico-borer (Lep.) *Mycolobia (Mycolophila) persicae*. L. lives in the burrows, & frass, or gum made
 { by the peach borer, *Algebraia exitiosa* Ag. Rep. 1872 p. 115. fig 4. IS. XI/3. (Lep.)
 Pro. fire. Ag. Rep. 1863. p. 574.

" " " " produced, by punctures made by leaf hoppers, *Erythronia ulis*, *basilaris*
 { Ag. Rep. 1863 p. 575. *E. basilaris* IS. II/5. 38. (Homoph)

Pear, blight, beetle. (Col.) see *Scaphisoma pyri*. Ag. Rep. 1863 p. 574. (Col.)

Pear mite. injures leaves. see *Tiphlodromus pyri*. Ag. Rep. 1872. p. 112. fig 2.

Pear psylla. (Hom.) L. I suck sap from twigs. &c. see *Psylla pyri*. Ag. Rep. 1864 p. 560. *Psylla*
 { IS. II/10. 11/34. 40. (Hom)

Pear slug. (Hym.) *Selandria. carasi*. consumes parenchyma of leaves of Pear, Cherry &c.
 { remedies &c. Ag. Rep. 1864. p. 547. IS. IX/29. (Hym)

Pear woolly root, aphid. see *Pemphigus (Eriosoma) pyri*. Ag. Rep. 1870. p. 86 fig. 54. fig. 54. (Hom.)

Pediculus. Ag. Rep. 1851. p. 58 & 1863. p. 316. (Hom.)

Pediculus humanus capitis. Hom. Human head louse. Ag. Rep. 1876. fig. 57.

Pediculus vestimentis. " " clothes & bare skin. " " fig. 58.

Pediculus pubis. " " body louse. — " " fig. 59.

Pedicularis. Bugs having raptorial fore feet for seizing & holding their prey, living on water.
 { ex. *Belostomatia americana*. Ag. Rep. 1875. p. 132. 134. IS. V/8. (Hem)

Pedironia, water bugs, having no fore raptorial feet. & hind tarsi like oars, & small for
 { swimming. Ag. Rep. 1875. p. 136. Example. *Notonecta undulata*. IS. V/4. (Hem)

P. - lar. *Plata limbata*. Ag. Rep. 1851 p. 57. (Hom.)

Pelidnota, punctate (Col.) Ag. Rep. 1854. p. 72. p. 66. I injures Grape fruit &c. — 1864. p. 62. — remedies 1863.
 { I suck. — I eat rotten wood. I injures foreign & berries of grapes. 1868. p. 52.
IS. IX/18. (Col)

Pemphigus pyri. (Hom.) (Uhler) Ag. Rep. 1864 p. 316. I injures Apple, pear, & roots, the upper
 { surface of the abdomen & head are covered by a dense mass of cottony like substance.
 { *Pemphigus Eriosoma pyri* (Hom.) Woolly root aphid Ag. Rep. 1870 p. 86 fig. 54.

Pemphigus Dactylophara. (Shiner) vitibolea (Hom.) I form hollow or bag like galls upon at
 { the mouth, on the underside of grape leaves, containing gall lice, or suck by
 { Riley to be one state of the much dreaded *Phylloxera vastatrix* of Europe.
 { Ag. Rep. 1872 p. 87. 88. fig. 56. (see also under head of *Dactylophara*) 1871 p. 57. fig. 23.
 { I was said to be identical with *Phylloxera vastatrix* or Grape root gall louse of
 { France. 1871. p. 67. fig. 23. — 1872. p. 116. G. W. Campbell, of Delaware, thinks the two insects
 { are the same. & Experimentally at the Dept. to the contrary. — 1874. p. 127. Experiments
 { in department to prove or disprove Riley's theory of the identity of the two insects.
 { 1876. fig. 45. grape leaf gall. *Pemphigus vitibolea*. IS. see in Diptera p. X/26. (Hom)

Pentatomia. (Hem.) Ag. Rep. 1854. on Cotton (Hem.)

Pentatomia, or "Gray Plant bug" of D. B. sucks sap at Cotton. (Hem.) Ag. Rep. 1853. p. 48 p. VIII. fig. 6.
 { probably is *Euschistus luridus* IS. II/12. (Hem)

Pentatomia a ♀ on Green Plant bug of D. B. sucks sap of Cotton plants (Hem.) Ag. Rep. 1854 p. 93 p. VIII. fig. 5.
 { probably is *Nezara helares*. *Rhaphigaster pennsylvanicus* IS. II/25. (Hem.)

Pentatomia. (Hem.) some feed on other insects (Hem.)

Pentatomidae. Ag. Rep. 1868 p. 316. (Hem.)

IS. Lower

- Pontania punctifera* (Hbst.) frequent Murkins, Thistles & weeds, lives on Sap of plant
 { Ag. Rep. 1875 p. 118 fig. 7. see *Euclyptus*. SS. 11/12. Hbst
- Pontania* ? sometimes destroy caterpillars Ag. Rep. 1875 p. 118. (Hbst)
- Pentonia* syn. of *Conopocapsa pennsylvanica* Collin moth see *Conopocapsa* SS. 25. XI/8. LXVIII/2 (Sep)
- Pentonia ulmivora* (Lep) ex *Robesia botrana* grape berry moth SS. 25. XI/8. LXVIII/2 (Sep)
- Pentacheta diffringens* farinose earth worm, imported with some plants from Japan.
 { Ag. Rep. 1874 p. 81. see *Megacotyle*.
- Pithecelasmus nubilalis* (Lep) cucumber moth. injures Melons, cucumbers, squashes, &c.
 { 1870 p. 84 fig 47. SS. LVI/12. (Lep)
- Pterocera* (Col) mere mention. Ag. Rep. 1863 p. 83.
- Phalangium* (Spider) Daddy Long Legs. of 25. Ag. Rep. 1872 p. 128.
- Phalaena* see *Lathryophaga nigrata*. SS. 27. XI/15 SS. XI/18 (Sep)
- Ph. nana*, *caninus* (Col) color metallic green. 2 sold, in Missouri, & Sacramento. Ag. Rep. 1868.
 { p. 88. fig 55. makes balls of dung. SS. VIII/14. (Col)
- Phaneroptera curvicauda* (Orth) (Rathvon) 1861 p. 382. fig 21. SS. 4/10. 4/12/3. 4/14 (unjustified Syn)
- Phasma* see *Lathryophaga*. Ag. Rep. 1870 p. 135. ex *Lathryophaga pomonae*. SS. 1/7 (Orth)
- Phasmodon* (Orth) "Spectre insect" or "walking sticks" feed on leaves, twigs & buds of
 { trees & shrubs. & resemble dead twigs & sticks. (Orth)
- Phenopoda plumosa* (Co) antennae woolly pilose. Ag. Rep. 1868 p. 95. fig 128. SS. XXX/27 (Col)
- Phorinus* (Col) see also *Ellethrus*. *Ellethrus* & *Phorinus* Ag. Rep. 1868 p. 95-1872 p. 155. SS.
- Phorinus* (*Ellethrus*) *pyralis*. "lightning bug". Ins phosphorescent at night. mere mention
 { 1873 p. 155. Ag. Rep. *Phorinus* SS. XI/16. (Col)
- Phryganeon planosae* (Hym) destroys *Silene* *lanceus*. "Larch chester" or "Tamarack"
 { "Larch" moth" Ag. Rep. 1866 p. 41. *Silene* SS. III/7. (Lep)
- Phryganea* (New) "Water fly" caddis or case fly. I live in cases in water, & as flies
 { form good food for fish. — example L. SS. VI/6 & SS. XI/8. (New)
- Phryganidae* (New) Ag. Rep. 1868 p. 309. (New)
- Phycita nubilosa* (Lep) *Megachile* *undulata* L. lives in small crooked horn like cases
 { feeding on fol of *Aphis*. *crab*. *plum*. & *thorn*. see *Megachile* *undulata* SS. LP. 3.
XVII. LXX/2. Lep.
- Phyllium* *sytho* (Orth) Leaf insect of the east Indies. Rathvon. Ag. Rep. 1862 p. 377.
- Phyllobius argenteus* (Col) Cu) green. injures *Prunus* & fruit of fruit trees Ag. Rep. 1865 p. 90 (Col)
- Phyllobius betulae* (Eu. Col) injures Pear. Ag. Rep. 1865 p. 90. (Col)
- Phyllobius oblongus* (Col Eu) destroys grafts of pear & plum Ag. Rep. 1865 p. 90. (Col)
- Phyllobius pyri* (Col Eu) injures *Prunus* & fruit of fruit trees. Ag. Rep. 1865 p. 90. (Col)
- Phyllophaga* see also *Lachnosterna*. May beetle Ag. Rep. 1863 p. 167. Col.
- Phyllophaga georgiana* Georgian leaf eater (Col)
- Phyllophaga quercina* (Col) May beetle. Rathvon Ag. Rep. 1861 p. 601. fig 35 36. destroys
 { foliage of Forest & fruit trees. — 1868 p. 88. 1872 p. 524. see *Phyllophaga fuscata*.
SS. VII 5. 7. 11. & XVII/60. (Col)
- Phyllophaga oblongata* (Orth) *Volatilis*. injures foliage of Orange trees. Ag. Rep. 1853 p. 265.
 { Volatilis of forest & fruit trees — Rathvon Ag. Rep. 1862 p. 382 — 1874 p. 181 fig 13.
- x *Phylloscelus alba* (Hom) frequently weevil. *Stemmbus* (Hom) 1876. SS. 1/38. (Hom)
- " " var *pallida* " " " SS. 1/53. (")
- x *Phylloscelus striatella* see *Onchocnus vittata* SS. LP. 27. SS. XVII/8 (Col)
- Phylloxera vastatrix* (Hom) grape root gall louse Ag. Rep. 1870 p. 87. fig 33. — said to be the same
 { as *Pemphigus ulmivora* or grape leaf gall louse. habit, nat hist, remedies & varieties
 of grapes attacked. 1877 p. 88 fig 22. *Remedies*, remedies, mode of propagation &c.
 Riley 1873 p. 387 — Remedy. Southwrest of carbon. 1873 p. 160 — 2000 francs. reward
 offered for discovery of the manner in which it is propagated from stock to stock.
 1873 p. 289. Remedy. Southwrest of Carbon. — experiments with root at the Dept 1874.
 p. 127. — value of Ag. Ent. by Riley. 1874/442. — 1876 fig 46. (Rhom)

- Phylloxera vitifolia vastatrix* (Hom) Grape root gall louse, produces bunches of knots, or bulbs, on the fibrous side roots, perhaps the identical insect which produces the galls on the underside of the leaves. Ag Rep 1872 p. 504. W. Campbell Ohio Hom
- Phymata*, *Syrphus* *enosa*, (Hely) destroys other insects. Butterflies, Bats, Wasps, plant lice, &c. Ag. Rep. 1875, p. 126, fig 35. *Phymata* 33, III/13. (Hely)
- Phytocacia*, *epiphyseum* (Col) (Hu) mines channels in roots of Carrots & resembles our *Oberca* Ag. Rep 1865, p. 89. (Col)
- Phytobius*, of *inis* (De) I cut out blister like spots on the leaves of the Salsp tree & pupae formed in little cocoons in the blister Ag Rep 1870 p. 68 fig 11. see *Cauter hennus*. 33, xvi/8. (Col)
- Phytoconis*, *quadriculatus*, *p. lineatus*, *Cautus lineatus*? injures foliage of Currants, Haws, mint, Hageia, Hicupia, Bittersweet, Raspberries, Dahlias &c. Hec. see *Urgus lineatus* 33, II/9. (Hely) ? (Ag. Rep 1845/94 1875 fig 33.) ?
- Phytolacca*, *decanora*, poke root, weed is poison Costerwaches. Ag. Rep. 1873, p. 157.
- Phytomyza* (Lep) leaf miners, producing blister like spots, & winding passages on the leaves. remedies &c. Ag. Rep. 1872 p. 135 Example, *Phytomyza nigricornis*, Euro-p 33 x/12 (Lep)
- x *Pieris rapae*. Lep European cabbage butterfly Introduction *Pieris injures* &c injures Cabbage Cauliflower mustard Turkeys Magnonella nasturtium willow &c &c Ag 1861/15, 2. & CVI/30 Ins I/14 & N.2 Lep (see Ag Rep 1870, p. 79, fig 36.)
- x *Pieris rapae*. (Lep) remedies. Hallowe. discussed. 1871, 82, fig 15 Larvae destroyed by 2 Spiders. *Theridion brassicae* & *hydropyllum*.
- Pieris oleracea* (Lep) Pot herb Ponder Hoor. I feed on Cabbage Pot herbs &c (Ag Rep. 1870 p. 79 fig 37). While better fly or Northern Cabbage worm, feed on Cabbage mustard Turnips 33, Ixxvii/7, xxxi/2. Lp., xcix/15, & Cvi/23. (Lep)
- Pieris protio*. Lep Southern Cabbage worm injures Turnips also (Ag Rep 1870 p. 79 fig 37) 33, I/6. Ins xxxvii/12. (Lep)
- Pigeon Tremex*. see *Tremex* *sinex columba* Ag Rep 1866 p. 41 I. bore into wood of Pear &c & is destroyed by *Pompia atrata* & *lunator* (Hym *Tremex columba* 33, II/12, 13. Hym.
- Pill beetle. *Byrrhus*, so called from feigning death when disturbed & drawing up its limbs & antennae so as to appear somewhat like a round full like ball, example, *Byrrhus (Cistis) americanus*, 33, V/11 (Coe)
- Pimpla atrata* *lunator*, Hymenoptera, the females of which have extremely long ovipositor like ovipositors, by means of which they deposit their eggs in the larvae of *Tremex sinex columba*, or the *pigeon tremex*, another Hymenopterous insect, the larvae of which live in deep burrows in the wood of Pear, & other trees. see *Rhyssa atrata*, 33, III/8. *Rhyssa, lunator*, III/4. (Hym.)
- Pimpla*? *sp* (Hym) destroy eggs in the eggs cases of *Coleoptera* species, or the migratory locusts of the western states. Ag Rep. 1874, p. 135. (Hym.)
- Pimpla* white *junis* *usculi* (Col) see *pusculi* *strobili*. Ag. Rep 1870 p. 71. — 1866 p. 41, & is destroyed by an *Ichneumon* fly *Pstrobis* 33, C/27. Ins Lvi/11. (Col) (1863 p. 573)
- Pine 3 in. fly. *Lophyrus*, *albus*, (Hym) Hails themselves &c. Ag Rep 1864 p. 546. 33, I/22. (Hym)
- Pine 12 in. beetle. (Col) *Hylurgus* *lineatus* eats under bark. See *Dendroctonus* 33, xv/8 xxxviii/12, 13. (Col)
- " " (Col) *Tomicus* *pinis*, lives under the bark of pine. 33, xix/6. (Col)
- Prophila* *casei* Cheese fly or maggot I live in Cheese & sometimes called skippers as they are able to spring to a considerable distance Ag Rep 1856 p. 29. 33, v/34. (Lep)
- Pirates* (Hely) feed on other insects Ag Rep 1866 p. 44. Hely
- Pirates*, *biguttatus* (Hely) sometimes called the spotted corsair, & is said to destroy "Bed bugs." *Acanthis lectularis*, (Hely) Ag. Rep. 1875, p. 127, fig 39. 33, IV/22. (Hely)
- Pirates*, (*melanolestes*) *picipes*, (Hely) found under stones, moss, logs of wood &c & feed on subterranean insects, & is capable of inflicting a severe sting. Ag Rep. 1875, p. 132, fig 42. *melanolestes picipes*, 33, XI/1. (Hely). 33, 1875.

Pride of China, or India, *su. Melia azedarach.*

Prionoclypeus armatarius (Lep.) lilac measuring worm Agl. Rep. Aug 4 Sep feeds on Lilac
 { 33. LXII/11. (Lep.)

Prionoclypeus (Lep.) *Prionoclypeus* Agl. Rep. 1861 p. 610. (Col.)

Prionoclypeus (Lep.) *Prionoclypeus* (Lep.) I feed on Rotten wood of Oak. Agl. Rep. 1866 p. 94.
 { fig. 121. 33. XX/32. (Col.)

Prionoclypeus cristatus, *Prionoclypeus nomenclatus*. (H.) destroy other insects, & also sting musthids.
 { severely destroy aphids, or head lice, in young, and caterpillars with almost
 all other insects they can overcome when older, Agl. Rep. 1852, p. 58. pl. 8.
 common name, "Wheel bug" from the form of its back. "Devil horse" &c. 1864 p. 557.
 1875. p. 127. fig. 41. *Prionoclypeus cristatus*. 33. III/14. (H.)

Prionoclypeus. Col. Agl. Rep. 1861 p. 613-1871 p. 150. (Col.)

Prionoclypeus brevicornis (Col.) 1870. p. 72. see *P. laticollis* 33. Lar. D 34. 33. I/5. (Col.)

Prionoclypeus californicus (Col.) *Prionoclypeus* Agl. Rep. 1861 p. 611. length over 2 1/2 inches. (Col.)

Prionoclypeus cyprinoides (Col.) *Prionoclypeus* Agl. Rep. 1861 p. 611. fig. 6. 2. L. cut wood of pine, *Orthocentrus*.
 { Prionoclypeus. 33. XVI/3. (Col.)

Prionoclypeus imbricatus (Col.) Feeds on the roots of Grape Vines, Orange, Pear, &c. Agl. Rep.
 { 1870. p. 72. 33. XXII/2.3. (Col.)

Prionoclypeus laticollis brevicornis. Agl. Rep. (Rathbun, 1861 p. 613. fig. 6. 36. L. in wood of decaying
 { poplar. — 1870. p. 72. fig. 22. L. injure hood of grape, poplar, oak, pear, Orange
 Orange, roots of pine. *Prionoclypeus laticollis*. 33. L D 34. 33. I/5. (Col.)

Prionoclypeus grossularis (Hym.) Native Currant or Gooseberry worm or saw fly. Feeds on Currant &c.
 { Agl. Rep. 1870. p. 72. — 1870. p. 118. It is destroyed by *Proctos* *Spinosus*. (Hym. 33. II/28)

Prionoclypeus identidem (Hym.) Cranberry saw fly. Agl. Rep. 1861 p. 611. (Hym.)

Prionoclypeus undulatus (Hym.) Feeds on grape vines, & blackberry bushes. 33. I 52. (Hym.)

Prionoclypeus americanus (Lep.) I feed on purple of Grape vines. & virginian creeper. Agl. Rep. 1861. p. 72.
 { fig. 6. 1870. p. 72. 33. L D 34. 33. I/5. (Lep.)

Prionoclypeus (Col.) (Col.) destroy other insects. Agl. Rep. 1865. p. 91. (Col.)

Prionoclypeus autumnalis (Fall or Autumn army worm) (Lep.) L. destroys Wheat, oats, rye, Sorghum.
 { Summ. &c. Agl. Rep. 1871 p. 376. & 1872 p. 118. 33. CVIII/15. (Lep.)

Prionoclypeus comitatus (Lep.) 1854. 161. in Cotton bolls. Agl. Rep. 1855. p. 102. fig. 3. injures cotton
 { bolls & marie in their ear. feeds also on Wild comfrey, Compositae, Tomato, fruit
 cabbage. &c. 33. LXIV/5. XIX/19. L D. XVII/5. (Lep.)

Prionoclypeus sexmaculata (Col.) a small brownish beetle found under tree bark &c. probably
 { mistaken for the bed bug. *Acanthia laticollis*. Agl. Rep. 1875. p. 127. *Prionoclypeus*
sexmaculata. 33. IV/25. (Col.)

Prionoclypeus (Col.) found in ants nests, & under moss, bark, or stones. Agl. Rep. 1868 p. 82. *Prionoclypeus*
 { 33. XXX/3. (Col.) (*Prionoclypeus Enchironii*)

Prionoclypeus chinensis (Col.) *Prionoclypeus* under bark of red oak. Agl. Rep. 1868 p. 105-107. fig. 140.
 { see *Thanasimus* 33. XX/2. (Col.)

Prionoclypeus nigripes (Col.) found in army on the L of a beetle. *Hydrotus aculeator*.
 { a wood boring beetle. Agl. Rep. 1868 p. 97. fig. 139. *Thanasimus*. 33. XII/19

Prionoclypeus rosea (Lep.) (Lep.) Cannot fly. injures Carnet. H. & c. Agl. Rep. 1872 p. 133. fig. 33. 33. X/10. (Lep.)

Prionoclypeus (Hym.) Agl. Rep. 1868 p. 263. time on Orange trees. *P. venosus* is found in clusters on
 { the trunk & branches of orange trees in Florida. 33. III/2. (Hym.)

Prionoclypeus (Col.) mere mention Agl. Rep. 1868 p. 99.

Prionoclypeus confederata, see also: *Prionoclypeus confederata* Pack. injures Orange foliage. 33. L D. XII/15. LXXXV/20
 { or pear & apple, & sucks the sap. Agl. Rep. 1864 p. 560. *Prionoclypeus* &c. — 1876. p. 30.

33. I/10. 11/30. 10. (Hym.)

Prionoclypeus (Hym.) Feeds on Sumach. Agl. Rep. 1876. fig. 35. (Hym.) 33. V/67. (Hym.)

Stenomatus. (Hym.) destroys *Chlorops*. a. *Lithorus* insect injuring wheat. &c.

{ See Ag. Rep. 1866 p. 41.

Stenomatus (Hym.) destroys the joint worm, *Triosoma*. (*Eurytoma*) *hordii*. (Hym.) an insect which forms subterfuges on the stalks of Wheat. Ag. Rep. 1866 p. 42 (Hym.)

Pteromalus tuberosus. (Hym.) deposits eggs in the cocoons of *Microgaster congregata*. a. { parasitic hymenopterous insect, that destroys Tobacco *Upotato* worm. *Macrusila* *canadensis* & *M. quinque maculata*. Ag. Rep. 1873 p. 158. (Hym.)

Pterostichus (Col.) some species in Europe are said to injure grain Ag. Rep. 1868 p. 86 { ex. *Pterostichus chalcitis* see *Proctus* SS. x/3. (Col.)

Pterinus pectinicornis. (German Book worm.) Injures books, & wood & Oak bark. { Maple & Hoare. Ag. Rep. 1868 p. 99. (Col.) *macropterus ruficornis*. SS. xxxiii/16

Pterinus ruficornis (Col.) were mentioned Ag. Rep. 1868 p. 99. SS. xxxiii/16 (Col.)

Ptilodactyla. (Cephron) *elaterina*. (Col.) food probably Oak. Ag. Rep. 1868 p. 94. SS. 150. SS. xxxii/29. (Col.)

Plinidae. (Col.) I. counterfeits death when disturbed. invades old wood, trees, &c. It feeds on { grain, skins, collections of natural history, &c. Ag. Rep. 1868 p. 98. 117. fig. 150. SS. xxxiii/21 (Col.)

Pinus. fur. (*humeralis*) (Col.) destroy, mottled with grains. collections of dried plants, &c. { insects stuffed animals, birds, &c. *Pinus* men. &c. Ag. Rep. 1868 p. 99. 117. Ag. 150 SS. xxxiii/11. (Col.)

Pinus humeralis. see *Pinus*. fur. (Col.)

Pulex irritans. See I feed on decaying vegetable & animal matter. Insect feeds { on blood of man & animals, birds, dogs, cats, &c. Ag. Rep. 1872 p. 135. Pulex irritans. SS. vii/107. (Lep.)

Pinkland snapping bug, or beetle, see *Alaus myops* 1868 p. 95. SS. x/17. (Col.)

Pyracis cinaleis (Lep.) see *Asopha costalis*. The Clover worm. SS. lxxxii/28. (Lep.)

Pyracidae. Ag. Rep. 1868 p. 314. (Lep.)

Pyrethrum carneum. *Proseum*. *P. purpuraceum*. Basis of the celebrated Persian insect { powder. used to destroy cockroaches, ants, & other insects. Ag. Rep. 1873 p. 1295.

Pyrethrum roseum. powder used to drive away fleas. Ag. Rep. 1873 p. 36. used also for { killing cockroaches. Ag. Rep. 1874 p. 133. fig. 6. *Stylaphysa orientalis* (Orth.)

Pyrethrum. *Williammole*. &c. used for the destruction of insects, a long article Ag. Rep. 1861 p. 222.

Pyrethrum. powder to destroy insects Ag. Rep. 1868 p. 92.

Pyrochroa coccinea (Eu.) (Col.) found under Birch & Oak bark Ag. Rep. 1868 p. 101. (Col.)

Pyrochroa dendroscites. *Dendroidea canadensis*, taken under bark of maple. Ag. Rep. 1868, { p. 101, fig. 171. *Dendroidea canadensis*. SS. xxxvi/4. (Col.)

Pyrochroa flaberrata. (Col.) I see frequently flowers. Ag. Rep. 1868 p. 101. (Col.)

Pyrochroidae (Col.) found under bark & in rotten wood Ag. Rep. 1868 p. 101. (Col.)

Pyrophorus noctilucus. feed on Sugar cane, Ag. Rep. 1868. 93. in Spanish "Cucuyo" { English "Fire fly" of West Indies, and South America, Insect abundant in South America. (Col.)

Pyrophorus phryganeus (Col.) Fire fly or beetle of Florida. Long description, of habits { flight, & experiments. Ag. Rep. 1873 p. 155. fig. 5 SS. lxxiii/43.

Pyrranthia isabellina (Orth.) (Lep.) I feeds on flower. *Munier* *Dandelion*. *Plantain*. { Grass &c. & is destroyed by an ichneumon fly. Ag. Rep. 1868 p. 101. SS. viii/10 SS. lxxvii/7 (Lep.)

Pyrrhocoris. *Dysdercus saturatus* (West.) red bug or Cotton stainer history enemy to cotton { first experiments of its application as a depent material by Dr Jackson

(Ag. Rep. 1858 p. 571 fig. 189 *Dysdercus saturatus* SS. l/11 West)

Pytho. americanus (Lep.) found in maple nests, or cocoons of *Stenocranus Rhagium lineatus* { SS. xii/12 SS. lxxvii/7 (Col.) where the larva or pupa had been destroyed by it, under pine

bark, in Spring. Ag. Rep. 1868 p. 104 fig. 189. *Pytho americanus*. SS. xxvii/26 (Lep.)

of the *Pyrochroa* &c. Col. found under pine bark Ag. Rep. 1868 p. 104. SS. lxxvii/26

Quadrupeds of Illinois. see also *Animals*. Ag. Rep. p. 52. to 110.

Quail, destroying Chickadee bugs. *Microtus*. *Blasius leucostictus* SS. 11/16/7. (Bot)

Radiok fly. see *Anthonomus raphani*. Ag. Rep. 1867. p. 73. (Bot)

Radiok fly. see *Anthonomus raphani*. & *A. radicum*. Ag. Rep. 1872. p. 134. & 134. *Anthonomus radicum*. SS. 11/2. (Bot)

Ranatra quadridenticulata? (Bot) Ag. Rep. 1873. p. 133. fig. 38. water bug. destroys insects.

{ Small fish. 74. *Ranatra quadridenticulata* SS. 11/3. (Bot.)

Ranatra. Ag. Rep. 1862. p. 376.

Ranatra pits lower. (Col) *Ranatra trilineata*. Larva, bore into pits, & destroy the corn. Ag. Rep. 1863 p. 576. & 1870 p. 67. SS. 11/1. (Col)

Rashberry lower. (Col) *Agrius nuficollis*. Larva, bore into the pits. Ag. Rep. 1870 p. 67. SS. 11/1. (Col)

Rat. Report 1. Entomology. & its relations to vegetable productions. of the soil.

{ with destructive & beneficial insects. Ag. Rep. 1861. p. 586.

{ " " Report 2. Ag. Rep. 1862. p. 372. SS. 11/1. Lancaster Pa.

Rat. poisons, traps, &c. Ag. Rep. 1863. p. 272.

Rear house. common name of *Mantis carolina*. Ag. Rep. 1854 p. 88 p. VIII. & 1870 p. 133.

{ SS. 11/1 to 16. (Col)

"Red bug" of S. C. Geo. &c. "Bete noir" of La. "seed bug" of Va. a small red acarus or mite which buries itself under the skin of mankind & frequently producing water blisters, & an intolerable itching. This must not be confounded with the following

Red bug of Florida or Cotton stainer *Pyrrhocoris Dysdercus suturalis* this stains the fibre of the cotton, with its excrement, & the exclusive sap. of the only seeds rendering it of much less value to manufacturer. Ag. Rep. 1858 p. 272.

{ SS. 11/1 (Bot) *Dysdercus suturalis*

" " Entomological researches on the red bugs, as cotton producing insects. by D. Jackson of Boston Ag. Rep. 1858. p. 272..

Red legged grasshopper, or Locust, see *Calopterus femur rubrum*. parasites red mites

{ *Asotoma locustarum* a parasitic fly *Sachna* 1872. Ag. Rep. 1867. p. 65 fig. 66. 1870 p. 76. fig. 32.

{ see *Calopterus femur rubrum*. SS. 11/1. & VIII. 2. (Col)

Red pepper recommended to destroy plant lice. (Aphis) Ag. Rep. 1873. 287.

Red shouldered Apter *Apter synoxylon basilaris* Ag. Rep. 1867. p. 71. requires wood of hickory. & elm. See *Synoxylon basilaris*. (Col) SS. 11/1. (Col)

Red spider, *Acarus telarius*? of Saunders report. a mite doing much injury to greenhouse plants, & vegetation in gardens &c. remedies. Ag. Rep. 1864. p. 364.

Red wheel of Ohio & some western states. see *Diploids*. (*Chauliomyia trilinea*).

{ SS. 11/10. (Col)

Reduviidae. Ag. Rep. 1868 p. 316. (Bot)

Reduviidae. Ag. Rep. 1864. p. 58. — 1868. p. 311. (Bot)

Reduviidae red edged. *Reduviidae* of D. J. J. (Ag. Rep. 1858. p. 24. & VIII. fig. 7 in cotton fields.

{ is *Largus succineus*. SS. 11/12 (Bot)

Reduviidae *Reduviidae* (Bot) *Pezomachus erostatus* destroys other insects & is a great

inflicting a severe wound on mankind with its piercer or proboscis. it is commonly known as the "wheel bug" from the form of its crested thorax. Ag. Rep. 1864 p. 558. — 1866 p. 51. — 1867 p. 67. — 1870 p. 124. fig. 46. 1872. 55 fig. 8. 1875 p. 110. fig. 3 p. 11. found on cotton & destroys caterpillars in *Prionoxystus* SS. 11/1. (Bot)

Reduviidae *Reduviidae* (Bot) said to destroy bud bugs *Anthrenus* Ag. Rep. 1873 p. 12. p. 40 SS. 11/1. (Bot)

Reduviidae *Reduviidae*. see *Sinea multispinosa*. destroys other insects SS. 11/1. (Bot) *Sinea*

Reduviidae *Reduviidae*. (Bot) see *Aphidius*. destroys other insects. & is said to kill honey bees. Ag. Rep. 1875. p. 130. fig. 48. *Aphidius* SS. 11/1. (Bot) *SS. 11/1. (Bot)*

Remedies for Coleoptera Ag. Rep. 1863 p. 579.

" " Orthoptera Hymenoptera &c. Ag. Rep. 1864 p. 543. &c.

" " Recapitulation Ag. Rep. 1872 p. 137.

Report Agricultural of 1854 p. 55 contains Insects on cotton &c. woodcut anatomy of Col. &c.

" " " " 1855 p. 115 " " Insects on Cotton, Orange &c.

" " " " 1856 " " " " Animals. Birds &c. no insects mentioned.

" " " " 1857 p. 121 &c. " " { Animals. Sea plant. Dec. D. B. Remedies under head of insects, frequenting Cotton.

" " " " 1858 p. 256 271 " " Insects on Cotton & Orange.

" " " " 1859 p. 540 &c. " " { Insects on Orange Experiments Testimony & accumulation of Animals. &c.

" " " " 1860 p. 312 to 322 " " Entomology by J. P. Walker Baltimore

" " " " 1861 p. 585 " " Baltimore. Cork. redoubt &c.

" " " " 1862 p. 572 " " " " 2nd.

" " " " 1863 p. 13. 274 " " { Samuels general Rep. on orders. Ornithology. Incheror. Animals. Birds. Ins. general classification. Coleopt. &c.

" " " " 1863 p. 561 " " Entomologist classification. 3rd. Coleopterists 579.

" " " " 1864 p. 540 " " " " Orth. neur. to Diptera. concluded from 1863 p. 579. Birds & Bird laws J. R. Dodge 1864 p. 431

" " " " 1865 p. 33. 37 " " { Entomologist. Birds & contents of their stomachs. 37. gold medal award. at Paris exposition p. 101.

" " " " 1866 p. 27 " " Paris exposition - Entomologia & Zoologica Exhib. in Paris 188 to 102. new fibres fossils &c. &c. garden of Acclimation

" " " " 1867 p. 38 " " Entomologist. divisions of Museum Insects & their uses

" " " " 1868 p. 79 " " " variety of insects on Elm potato &c.

" " " " 1869 p. 60. " " Food habits of beetles with woodcuts

" " " " 1870 p. 65 " " { Plan of Museum vegetable & animal fibres paper Dyes. Food. Poultry &c.

" " " " 1871 p. 69 to 72 " " { Rep. of Entomologist & Curator of museum Col. Orth. Hymen &c.

" " " " 1872 p. 112 " " { Rep. Ent. & curator museum. Estimate of damage done &c.

" " " " 1873 p. 152 " " " " " " "

" " " " 1874 p. 112 " " " " " " "

" " " " 1875 p. 114 " " " " " " "

" " " " 1876 " " " " " " "

" " " " 1877 " " " " " " " Orthoptera. &c. figs

" " " " 1878 " " " " " " " Hymenoptera. &c. figs

" " " " 1879 " " " " " " " Hymenoptera. &c. figs

" " " " 1880 " " " " " " " Hymenoptera. &c. figs

" " " " 1881 " " " " " " " Hymenoptera. &c. figs

" " " " 1882 " " " " " " " Hymenoptera. &c. figs

" " " " 1883 " " " " " " " Hymenoptera. &c. figs

" " " " 1884 " " " " " " " Hymenoptera. &c. figs

" " " " 1885 " " " " " " " Hymenoptera. &c. figs

" " " " 1886 " " " " " " " Hymenoptera. &c. figs

" " " " 1887 " " " " " " " Hymenoptera. &c. figs

" " " " 1888 " " " " " " " Hymenoptera. &c. figs

" " " " 1889 " " " " " " " Hymenoptera. &c. figs

" " " " 1890 " " " " " " " Hymenoptera. &c. figs

" " " " 1891 " " " " " " " Hymenoptera. &c. figs

" " " " 1892 " " " " " " " Hymenoptera. &c. figs

" " " " 1893 " " " " " " " Hymenoptera. &c. figs

" " " " 1894 " " " " " " " Hymenoptera. &c. figs

" " " " 1895 " " " " " " " Hymenoptera. &c. figs

" " " " 1896 " " " " " " " Hymenoptera. &c. figs

" " " " 1897 " " " " " " " Hymenoptera. &c. figs

" " " " 1898 " " " " " " " Hymenoptera. &c. figs

" " " " 1899 " " " " " " " Hymenoptera. &c. figs

" " " " 1900 " " " " " " " Hymenoptera. &c. figs

" " " " 1901 " " " " " " " Hymenoptera. &c. figs

" " " " 1902 " " " " " " " Hymenoptera. &c. figs

" " " " 1903 " " " " " " " Hymenoptera. &c. figs

" " " " 1904 " " " " " " " Hymenoptera. &c. figs

" " " " 1905 " " " " " " " Hymenoptera. &c. figs

" " " " 1906 " " " " " " " Hymenoptera. &c. figs

" " " " 1907 " " " " " " " Hymenoptera. &c. figs

" " " " 1908 " " " " " " " Hymenoptera. &c. figs

" " " " 1909 " " " " " " " Hymenoptera. &c. figs

" " " " 1910 " " " " " " " Hymenoptera. &c. figs

" " " " 1911 " " " " " " " Hymenoptera. &c. figs

" " " " 1912 " " " " " " " Hymenoptera. &c. figs

" " " " 1913 " " " " " " " Hymenoptera. &c. figs

" " " " 1914 " " " " " " " Hymenoptera. &c. figs

" " " " 1915 " " " " " " " Hymenoptera. &c. figs

" " " " 1916 " " " " " " " Hymenoptera. &c. figs

" " " " 1917 " " " " " " " Hymenoptera. &c. figs

" " " " 1918 " " " " " " " Hymenoptera. &c. figs

" " " " 1919 " " " " " " " Hymenoptera. &c. figs

" " " " 1920 " " " " " " " Hymenoptera. &c. figs

" " " " 1921 " " " " " " " Hymenoptera. &c. figs

" " " " 1922 " " " " " " " Hymenoptera. &c. figs

" " " " 1923 " " " " " " " Hymenoptera. &c. figs

" " " " 1924 " " " " " " " Hymenoptera. &c. figs

" " " " 1925 " " " " " " " Hymenoptera. &c. figs

" " " " 1926 " " " " " " " Hymenoptera. &c. figs

" " " " 1927 " " " " " " " Hymenoptera. &c. figs

" " " " 1928 " " " " " " " Hymenoptera. &c. figs

" " " " 1929 " " " " " " " Hymenoptera. &c. figs

" " " " 1930 " " " " " " " Hymenoptera. &c. figs

" " " " 1931 " " " " " " " Hymenoptera. &c. figs

" " " " 1932 " " " " " " " Hymenoptera. &c. figs

" " " " 1933 " " " " " " " Hymenoptera. &c. figs

" " " " 1934 " " " " " " " Hymenoptera. &c. figs

" " " " 1935 " " " " " " " Hymenoptera. &c. figs

" " " " 1936 " " " " " " " Hymenoptera. &c. figs

" " " " 1937 " " " " " " " Hymenoptera. &c. figs

" " " " 1938 " " " " " " " Hymenoptera. &c. figs

" " " " 1939 " " " " " " " Hymenoptera. &c. figs

" " " " 1940 " " " " " " " Hymenoptera. &c. figs

" " " " 1941 " " " " " " " Hymenoptera. &c. figs

" " " " 1942 " " " " " " " Hymenoptera. &c. figs

" " " " 1943 " " " " " " " Hymenoptera. &c. figs

" " " " 1944 " " " " " " " Hymenoptera. &c. figs

" " " " 1945 " " " " " " " Hymenoptera. &c. figs

" " " " 1946 " " " " " " " Hymenoptera. &c. figs

" " " " 1947 " " " " " " " Hymenoptera. &c. figs

" " " " 1948 " " " " " " " Hymenoptera. &c. figs

" " " " 1949 " " " " " " " Hymenoptera. &c. figs

" " " " 1950 " " " " " " " Hymenoptera. &c. figs

" " " " 1951 " " " " " " " Hymenoptera. &c. figs

" " " " 1952 " " " " " " " Hymenoptera. &c. figs

" " " " 1953 " " " " " " " Hymenoptera. &c. figs

" " " " 1954 " " " " " " " Hymenoptera. &c. figs

" " " " 1955 " " " " " " " Hymenoptera. &c. figs

" " " " 1956 " " " " " " " Hymenoptera. &c. figs

" " " " 1957 " " " " " " " Hymenoptera. &c. figs

" " " " 1958 " " " " " " " Hymenoptera. &c. figs

" " " " 1959 " " " " " " " Hymenoptera. &c. figs

" " " " 1960 " " " " " " " Hymenoptera. &c. figs

" " " " 1961 " " " " " " " Hymenoptera. &c. figs

" " " " 1962 " " " " " " " Hymenoptera. &c. figs

" " " " 1963 " " " " " " " Hymenoptera. &c. figs

" " " " 1964 " " " " " " " Hymenoptera. &c. figs

" " " " 1965 " " " " " " " Hymenoptera. &c. figs

" " " " 1966 " " " " " " " Hymenoptera. &c. figs

" " " " 1967 " " " " " " " Hymenoptera. &c. figs

" " " " 1968 " " " " " " " Hymenoptera. &c. figs

" " " " 1969 " " " " " " " Hymenoptera. &c. figs

" " " " 1970 " " " " " " " Hymenoptera. &c. figs

" " " " 1971 " " " " " " " Hymenoptera. &c. figs

" " " " 1972 " " " " " " " Hymenoptera. &c. figs

" " " " 1973 " " " " " " " Hymenoptera. &c. figs

" " " " 1974 " " " " " " " Hymenoptera. &c. figs

" " " " 1975 " " " " " " " Hymenoptera. &c. figs

" " " " 1976 " " " " " " " Hymenoptera. &c. figs

" " " " 1977 " " " " " " " Hymenoptera. &c. figs

" " " " 1978 " " " " " " " Hymenoptera. &c. figs

" " " " 1979 " " " " " " " Hymenoptera. &c. figs

" " " " 1980 " " " " " " " Hymenoptera. &c. figs

" " " " 1981 " " " " " " " Hymenoptera. &c. figs

" " " " 1982 " " " " " " " Hymenoptera. &c. figs

" " " " 1983 " " " " " " " Hymenoptera. &c. figs

" " " " 1984 " " " " " " " Hymenoptera. &c. figs

" " " " 1985 " " " " " " " Hymenoptera. &c. figs

" " " " 1986 " " " " " " " Hymenoptera. &c. figs

" " " " 1987 " " " " " " " Hymenoptera. &c. figs

" " " " 1988 " " " " " " " Hymenoptera. &c. figs

" " " " 1989 " " " " " " " Hymenoptera. &c. figs

" " " " 1990 " " " " " " " Hymenoptera. &c. figs

" " " " 1991 " " " " " " " Hymenoptera. &c. figs

" " " " 1992 " " " " " " " Hymenoptera. &c. figs

" " " " 1993 " " " " " " " Hymenoptera. &c. figs

" " " " 1994 " " " " " " " Hymenoptera. &c. figs

" " " " 1995 " " " " " " " Hymenoptera. &c. figs

" " " " 1996 " " " " " " " Hymenoptera. &c. figs

" " " " 1997 " " " " " " " Hymenoptera. &c. figs

" " " " 1998 " " " " " " " Hymenoptera. &c. figs

" " " " 1999 " " " " " " " Hymenoptera. &c. figs

" " " " 2000 " " " " " " " Hymenoptera. &c. figs

" " " " 2001 " " " " " " " Hymenoptera. &c. figs

" " " " 2002 " " " " " " " Hymenoptera. &c. figs

" " " " 2003 " " " " " " " Hymenoptera. &c. figs

" " " " 2004 " " " " " " " Hymenoptera. &c. figs

" " " " 2005 " " " " " " " Hymenoptera. &c. figs

" " " " 2006 " " " " " " " Hymenoptera. &c. figs

" " " " 2007 " " " " " " " Hymenoptera. &c. figs

" " " " 2008 " " " " " " " Hymenoptera. &c. figs

" " " " 2009 " " " " " " " Hymenoptera. &c. figs

" " " " 2010 " " " " " " " Hymenoptera. &c. figs

" " " " 2011 " " " " " " " Hymenoptera. &c. figs

" " " " 2012 " " " " " " " Hymenoptera. &c. figs

" " " " 2013 " " " " " " " Hymenoptera. &c. figs

" " " " 2014 " " " " " " " Hymenoptera. &c. figs

" " " " 2015 " " " " " " " Hymenoptera. &c. figs

" " " " 2016 " " " " " " " Hymenoptera. &c. figs

" " " " 2017 " " " " " " " Hymenoptera. &c. figs

" " " " 2018 " " " " " " " Hymenoptera. &c. figs

" " " " 2019 " " " " " " " Hymenoptera. &c. figs

" " " " 2020 " " " " " " " Hymenoptera. &c. figs

" " " " 2021 " " " " " " " Hymenoptera. &c. figs

" " " " 2022 " " " " " " " Hymenoptera. &c. figs

" " " " 2023 " " " " " " " Hymenoptera. &c. figs

" " " " 2024 " " " " " " " Hymenoptera. &c. figs

" " " " 2025 " " " " " " " Hymenoptera. &c. figs

" " " " 2026 " " " " " " " Hymenoptera. &c. figs

" " " " 2027 " " " " " " " Hymenoptera. &c. figs

" " " " 2028 " " " " " " " Hymenoptera. &c. figs

" " " " 2029 " " " " " " " Hymenoptera. &c. figs

" " " " 2030 " " " " " " " Hymenoptera. &c. figs

" " " " 2031 " " " " " " " Hymenoptera. &c. figs

" " " " 2032 " " " " " " " Hymenoptera. &c. figs

" " " " 2033 " " " " " " " Hymenoptera. &c. figs

" " " " 2034 " " " " " " " Hymenoptera. &c. figs

" " " " 2035 " " " " " " " Hymenoptera. &c. figs

" " " " 2036 " " " " " " " Hymenoptera. &c. figs

" " " " 2037 " " " " " " " Hymenoptera. &c. figs

" " " " 2038 " " " " " " " Hymenoptera. &c. figs

" " " " 2039 " " " " " " " Hymenoptera. &c. figs

" " " " 2040 " " " " " " " Hymenoptera. &c. figs

" " " " 2041 " " " " " " " Hymenoptera. &c. figs

" " " " 2042 " " " " " " " Hymenoptera. &c. figs

" " " " 2043 " " " " " " " Hymenoptera. &c. figs

- Stilpiphorus paradoxus* (Col) Es? Probably parasitic on Wasps. Ag Rep 1865 p 101. (Col.)
- Rhinophoridae* (Col) probably parasitic in habits. Ag Rep. 1863 p 101.
- Rhinovius* (Boem). Root plant loose. on herbaceous in flower garden Ag Rep 1876 p 44 33 III/20 (Hem)
- Rhinopenthes pusilla* (Col) found in wheat by Dr Leconte. 1863 p 99, fig 137. 33 XXIII/16 (Col)
- Rhinophragus depressus* (Col) Es. Ag Rep. 1865 p 91. destroy. *Botanichidae* (Col)
- Rhopalus lateralis* (Hes). E. sucks sap of plants. & probably injure pear buds. Ag Rep 1875 p 121, fig 10.
33. IX/19 (Hes)
- Rhinotrachelus nemphar* (Col) Curculio or Plum weevil - Ag Rep 1854 p 81. p 7. 1855 p 311.
- See Conotrachelus nemphar. 33 XIV/5. & 33 C/30. (Col)
- Rhynchites alliana* (Col) (Em, color blue. cuts off. twigs & young branches of fruit trees.
- Ag Rep. 1865 p 90. (Col)
- Rhynchites bacchus* (Col) (Em) (Beaman, French) pierces young fruit of apple. I. color. rather red
- Ag Rep. 1865 p 90. (Col)
- Rhynchites betulae* (Su) Col. (Cypr lewigeon, French) Rolls up leaves. & destroys foliage of
- Grape vines. Ag Rep 1865 p 87. (Col)
- Rhynchites conicus* (Col) (Em) color steel blue. injures buds of fruit trees Ag Rep 1863 p 90 (Col)
- Rhynchites cuneus* (Col) (Em) injures piths Ag Rep 1865 p 80 (Col)
- Rhinophoridae* (Col) Ag Rep. 1863. p 274. (Col)
- Rhinocallus lunimarmari* (Col) Ag Rep. 1861. p 604. fig 46 "Palmetto weevil" 1861. p. 604. fig 46.
- I eat in wood of Palmetto. See Rhynchophorus crenatus. 33 XIII/21. Col (4 new)
- & the Calandra palmarum of Rathvon. 1861 p 21 P.
- Rhyparochromus. Microphus*. *Blissus*. *destructor*. *leucophterus*. Chinch bug. Ag Rep. 1864 p 558.
- Remedies. — destroys grass, grain, Maize, potatoes vegetables &c &c. Remedies. habits &c
- 1870 p 89. fig 59. — remedy salt. 1871 p 84 fig 17. — 1873 p 122. fig 26.
- Blissus (Rhyparochromus) leucophterus. 33 II/15. (Hes)
- Rhyssodidae* (Col). mere mention. Ag Rep. 1866 p 84. (Col)
- * *Rhyssa atrata*. *fluator*. (*Pimpla* Syn) (*Hymen*) destroy larvae of *Hemes Columbia* or the
- region Texmex. in wood of pear &c. See also Pimpla. Rhyssa atrata 33 III/8
- Rhyssa fluator 1/29. III/4 (Hym.)
- Ribbed Rhagium Col* see *Stenocorus Rhagium lineata*. 33. XVI/9. XLVI/47. (Col)
- Rice weevil*. see *Sitophilus*. *Calandra oryzae*. Ag Rep. 1861. p 603. (Rathvon) & 1863 p 573. (Calandra)
- 33 XII/1. (Col)
- Roach* vulgar name for Cockroaches. *Blattia*. *Ectophaea*. *periplaneta*. &c &c
- Roberts* Dr Eugene. recommending decortication of trees & to destroy bark & wood bony
- insects. Ag Rep. 1865. p 92.
- Robin American*. food & growth. Prof Inadwell, Mass^{ts} an article. Ag. Rep 1860 p 88.
- Rocky mountain locust*. *Calopterus spretus*. Ag Rep 1870 p 76 fig 31. — 1874 p 137. &c &c
- See Calopterus spretus. 33 XIII/15. VIII/1. Orth.
- * *Robin Red breast*. Europe. should be imported Ag Rep 1870 p 90
- Romalia*. (Orth) (Rathvon) Ag Rep 1862 p 384. mere mention.
- Romalia monoptera* (Orth) Lubber grasshopper Ag Rep 1858 p 265 injures foliage of Orange trees
- vegetables &c. — Injures peaches, figs, melons, vegetables &c Ag Rep. 1872 p 116, fig 67.
- Localities injured 1872 p 118. 33
33. III/4 (Orth)
- Rose beetle* (not Rose bug). *Rosa chaffer* see *Macrodactylus sublimosus*, injures Rose. Grape &c
- See Macrodactylus. 33 IV/23. (Col)
- Rose sawy*. (form) see *Calandria*. *rosae*. remedies. Ag Rep 1870. (78). 33 VI/8. (Hym.)
- Rowe beetles* (Col) see *Staphylinidae* Ag Rep 1870 p 66. destroy other insects. &c. *Cryptulus villosus*.
- 33 XXIX/27. (Col)
- Rough & scabrous*. Col. see *Asmoderma scabra*. Ag Rep 1860 p 320. — 1863 p 90. 33 X/3. (Col)
- Rutelidae* Col) mere mention. Ag Rep 1868 p 88 Col. 33 lower.

- Sacred beetle of the Egyptians. *Scarabaeus*. (Col.) 1868, p. 86. *Scarabaeus aegyptiorum* 1868 p. 86.
 Salt for wire worms. (See of Elder) *Chalcids* to be used is recommended by Mr. Macchi.
 { Ag. Rep. 1869, p. 442. (Europe). (Coe)
Saltatoria (Orth.) Lar. leucis. as Grasshoppers. Ag. Rep. 1874, p. 120, 131. 1875, p. 234. (L. H. W.)
Samia. *Cecropia*. *Attacus*. *Platysamia*. Ag. Rep. 1864 p. 526. 1865, p. 93. 1866, p. 36. 1867, p. 74. 1868, p. 265.
 { food. apple. Cherry. Elm. Plum &c. see *Platysamia cecropia*. S. G. L. coc. 4th. L. young & shells;
 { Xvi. 12. (L. H. W.)
Samia *Attacus* *cynthia*. (L. H. W.) not successful as a silk producing caterpillar. Ag. Rep. 1867 p. 74.
 { not yet much utilized. Ag. Rep. 1870, p. 81. Japanese or *Alanthus* silk worm.
 { J. T. Harrows attempts to reintroduce it. food. *Alanthus* & castor oil bean. *Samia*
Cynthia S. G. Xvi. 4. Xvi. 50. (L. H. W.) (see also *Attacus*)
Samia 3d article on Nomenclature & ornithology. Ag. Rep. 1863, p. 265.
 " " " " Oology 1864, p. 356.
 " " " " Value of hives on the farm 1867 p. 201.
 Sand flies see *Simulidae*. Ag. Rep. 1872 p. 128. (L. H. W.)
Santarus (Coe) appears entire. Ag. Rep. 1868, p. 94. (see also X)
Sandalus (see also *Senecio*) *puca*. Ag. Rep. 1868, p. 94. more mention. *Terra reica*. S. G. XX. 13. (Coe)
Sandalus niger Ag. Rep. 1868 p. 94. S. G. Xvi. 13. (Coe)
Satorda (*Satorda*). *candida* (L. H. W.) Ag. Rep. 1858, p. 367. - 1860, p. 377. (L. H. W.) apple tree
 { however. I live in wood of thorn. (*Crataegus*) mountain ash. shade bush. &
 { Apple. see remedies. - 1861, p. 616, fig. 77. 78. 83. I live in wood of Apple. Hawthorn.
 { &c. remedy. plant Hawthorn hedges around orchards. (Rathvon) *Satorda*.
candida S. G. p. 12. 127. S. G. 12. 127. (1863 p. 52 also)
Syntherisma *inula* (Coe) *Rathvon*. Ag. Rep. 1861, p. 618, fig. 77. 83. Larva feed in wood of
 { Linden. see *Eucalyptus*. *Syntherisma*. S. G. 12. 127. (Coe)
 { *Syntherisma* (L. H. W.) Larva see 1863 p. 52. 127. 128. on cotton see *Cicconis*
Syntherisma S. G. 12. 127. 128. 129. *Cicconis* *inula*. S. G. 12. 127. (Coe)
Syntherisma (*Syntherisma*). Larva in other insects. Ag. Rep. 1866 p. 44. 45.
Syntherisma (or *Syntherisma* L. H. W.) *Cicconis*. Ag. Rep. 1867, p. 166. (L. H. W.)
Syntherisma *inula* (L. H. W.) flesh fly. *Rathvon* *inula* S. G. Ag. Rep. 1872, p. 132, the insect
 { is sometimes producing its larva or maggot alive & not in the eggs which are
 { hatched in the body of the parent fly. S. G. 12. 127. (Coe)
Syntherisma *inula* (L. H. W.) *Rathvon* or *Syntherisma*. Ag. Rep. 1867, p. 166. (L. H. W.)
 { 4 eggs in the flesh or marbled. 5 eggs in the foot or toe. these eggs hatching
 { produce larvae which eat up the flesh. sometimes causing dreadful sores. if not
 { carefully extracted Ag. Report. 1872 p. 136. remedy remedy *Syntherisma*
 { S. G. 12. 127. (Coe)
Saturnia. (Coe) 1854, p. 60 Ag. Rep. "Corn Emperor" Ag. Rep. 1855 p. 8. fig. 9 p. 11.
 { Caterpillars feed on foliage of Cotton corn (Muir) Helios Balsam Poplar
 { Dogwood &c. in *Orthocentrus* *inula*. S. G. 12. 127. 128. 129. (L. H. W.)
Saturnia. Ag. Rep. 1868, p. 314. (L. H. W.) *Saturnia* *inula*. S. G. 12. 127. 128. 129. (L. H. W.)
Saturnia *inula* (L. H. W.) Larva destroyed by *Saturnia* *inula* & *Saturnia* *inula*. S. G. 12. 127. 128. 129. (L. H. W.)
 { Ag. Rep. 1868, p. 314. (L. H. W.) *Saturnia* *inula* (L. H. W.)
Saturnia (Hym) see *Empyridae* *Saturnia* *inula*. *Saturnia* *inula*. S. G. 12. 127. 128. 129. (L. H. W.)
 { native current saw fly. *Saturnia* *inula* 1870, p. 27. 28.
 { *Saturnia* *inula* (L. H. W.) *Saturnia* *inula*. S. G. 12. 127. 128. 129. (L. H. W.)
 { *Saturnia* *inula* (L. H. W.) supposed to be caused by insects. *Saturnia* *inula* & *Saturnia* *inula*.
 { Ag. Rep. 1872, p. 116. (probably not the cause but similar the effect is) - S. G. 12. 127. 128. 129. (L. H. W.)
 { *Saturnia* *inula* (L. H. W.) said to be caused by an acarus or mite. Ag. Rep. 1864, p. 263. & 1869, p. 366.
 { with remedies.
 Scale insect, see *Coccus*, *Aspidiotus*. &c.

Scaphidiidae (Col) more mention. *Alg. Jap.* 1868. p. 83.

Scaphinotus (Col) Ag Rep. Rathvon 1861. p. 592

Scarabaeidae (Col.) eggs enclosed in round balls of excrement. Ag. rep. 1868, p. 86. The sacred beetle
for the Egyptians 1864, 600. 1863, p. 274. 1864, in 264 Col. Ex. Canthion laevis 389 in 2 Col.

Scanned Macrocntharus variator, Macronoxia, variolosa, IS XXI/20, (2c)

Scinropodidae (Col) only one species in Arizona. Ag. Rep. 1865, p 94. (Col)

Sciara lucata. & *S. quinque maculata* & Europe. (L.)
 { Turnip midges. Feed in pastured & decayed
 { turnips, & potatoes. & supposed to cause the disease called the scab. Eng Agr Rep. 1872. p. 116.
Sciara lucata. F. & S. (L.)

Sciara (Mioscira) mali. Apple midge. ♀. Found on apples injured by the codling moth.

{ *Cimprocapsa pomonella*. Ag Rep 1872 p 116. (Lep.)

S. indica (L.) "Pear midge" destroys young & undeveloped fruit, causing them to wither and fall to the ground. U.S. 282, 1916. (L.)

Scara sinuata, Tumul or Palat mior. Uy. 24, 18⁷² / 116. Cu uso n. ura. Uy.

Sciara (genus *Sciara*) W. W. forms an elongated mass like a rope or worm, of hundreds of
the larvae banded together. I once saw coming from fungi on which they probably
feed, usually known as the brake worms from their peculiar habits. Ge. No. 29.

Sciara Thumae (Lef.) Snake, or army worm. v Germany, raised as above No. XI 5. Lef.

Sciara (resembling *Thomas*) found feeding on *Pinguic. Umanita muscarius*. U. L. C. 1872 p 116

Scolops. (Fungora) sulcipes (Horn, Ug. Rep. 1876, 194. Frequently on ambles & cacti. Slab 1 50 1/2 (throat)

Scolytus curvatus Col Hickory bark borer, Linguine bark & Hickory & Maple
1807 p. 74. & 1810, p. 68. see Scolytus quadripinosus D. G. xlv. (C.)

D. corymbosus { var. (Cory) Leg. Staph. 1863. p. 314 320. (Walker) I eats wood under bark of logs "Pear beetle"
"beetle" 1863. p. 574. remedies, &c.

Scorpius... the larvae are said to be destroyed by *K'owab' p'ranatus*, (E. n. s.) *Heloma*, *cronata*, *E. silvanus tridentatus* (as shown in the Paris Exhibition, 1865) p. 91. (P. t.)

Scorpion. water. see *Nepa apiculata*. ♂♂ feeds on water insects. ♂♂ Aug Rep 1875, '74 57. J.G. v. 1a. H.

Scydmenidae (Col) taken in Ants nets 119 Feb 1868 h. 82. 104 (ex, ex. *Scydmenus clavipes* 55xxx/10

Seed Tick of Mid. & Va. etc. see Red bug, or "Bete rouge" of Louisiana

Sclundria cerasi. Error Celanoria Ag 1860. p 315. (K. ym)

S. undecima "cerasi" (Hym.) "Cherry slug." Ag. Rep. (Wheeler) 1860, p. 315. L. consumes the parenchyma of the leaves, leaving the tree apparently scalded or scorched, much by. - 1864, p. 67.
Cherry, or "Ran slug," not remedied. - 1870, p. 78. Lg. 34. 39. (X 34. Hym.)

Selandria nitens (Horn) Grape vine saw fly. Larva. Feeds on Grape varieties. (1926, 1964, p. 576.)
{ 33 IX/36. (Horn)

Selandria, rosea. (Horn) Rose slug. Agl. Pap. 1870 p. 78. remedies Linguae folia ex of Rose bushes.
C. 111. Horn 1870. p. 78. remedies 2^o. 29. VII. 1870. (Horn)

Semasiu. { *Ag. Apr. 1867 p. 18. nemidius* *\$5.110 (1867m)*
pinivivora *Leh. 2 inhab. Curculio injuncta* *Plums. Ag. Rep. 1867 p. 23. TS. XC VII 1/2 (1867)*

Sexicolor, viricolor (Col.) I feed on foliage of Apple pear &c. & frequently Whortle berry bushes.

(Aq. Rep 1868 p 87. (Col) 351x/21.

Senecio (Omalotheca) senecioea (Pb.) I fed on foliage of *Samb. rac.* + *Ros. Ag. Rup.* 1868. p. 8

Sinca ^{the} ~~*Campylorhina*~~ *vespertina*. Ag. Rep. 1868. p. 85 & 115. 18. IX. 26. 19. (Col.) as found on young of same bird. & non Col.

Sarcenia { Syn. *Amptomona* & *Omatacilia* *Sarcenia vespertina* B.G. IX/17. Cae 1
(*Bombyx*) *moji*, Chinese silk worm. See *Bombyx moji*. B.G. 2^a. 2c XXI/12. 16.
{ XLVI/1, (LXV)

Scaphus (Laitha) dilatatus (Holt) Feeds on insects, fish eggs & young fish & are aquatic in habit.
Syn Laitha stollii *Scaphus dilatatus*. D.G. 4/11. Holt

Seventeen Year Locust. (or Harvest fly.) see Cicada septendecim Ag. Rep. 1862. p. 35. 1864. p. 359.

+ *Semicornuta* ^{43/59 (606)} *Coi.* *Civ* *Apr.* 1861/606. (*Lathrom.*) (*Coi*) Beetles having saw like antennae. (Glover)

Spectra, insects, ser. *Phasmidae*. 10th. Ag. Rep. 1874, i 90.

Specterum viridatum, (Osh.) I found in Florida, the males much smaller than the females.
 { feed on long. grass. Ag. Rep. 1862. p. 377. on Unicombopha buxetoides. F. G. 1/8 (Osh.)

Spectrum "emerald" (Orth) Spectrum insect tracking stick. (Ag. Dept. Calverton) 1862 h 37.

(fig. 11) Imprints on both leaves of *Eucalyptus* Lath. found 10.4.135, fig. 6.

see Diapheromera. femorata 19.1/7. (Cuth.)

Sphaeria { *morbose*. From tree knot. a "fungoid growth on incision or wound of *Querc. (leaves,*
 { *oak,* trees. generally known as the "Black Knot" remedy. Ag Rep 1863, p. 573.
 { *the caruncles.* Other ones are frequently found in these *Quercus*. but by no means
 cause them.

Sphaerulidae (Col.) Feed upon vegetable excrementitious matters. *Ag. Rep.* 1868, p. 81, 108.

Genus Phaeothamnium. scaberrimus. 29. xxxvii. 3. (Col)

Sphaerostomus var. (Kuhn, Ag. Rep., 1861 p. 502. more mention. Ex. Sphaerostomus stenothemus!

SG 11/20. (Col)

Sphenophorus. ♀ (Col) Bill bug, or corn (Maize) boror. Found in stalks of maize. No legs

{ 1854. p 67. pl 4. — 1870. p 68. (Col)

Sphenothorus canyosus (Col), injures maize by piercing stem. Ag. Rep. 1876. 265. 1910.

{ J. P. XIII / 6. (Col.)

Sphenorhynchus punctatus, Col. (Rathvon), Ag. Rep. 1861, p. 603, fig. 48. Ins. seeds on the

{ *Silage*. &c. as mild cotton. (as *Asclepias*) Fig. XIII 28 (Cov)

Sphenanthus Loac. (Col.) narrow blades or leaves at nodes, making six or eight nodes, six of 'em

{size of a pin or larger. Ag. Rep. 1870. p 68.

Sphex (*Stym*) *provisus*. its nest with cockroaches. (Pavlov) *Ag Rep.* 1862 p. 376. example.

{ Sphex flavipes. T.G. III/24 (Hym)

Springdale. Aug. Sep. 1868 p. 314. (Lep.)

Spinn. carolina. Macrosela. Tobacco worm. Hyg. (Sep.). poisoning with Cobalt. Ag. Rep.

1855. 266 in macrodon 282 11/6, 284 XL/2. (Sep)

Sphinx quinquemaculata, Celsus, Totato worm. Fly, see *Macrosila*. 23. 2 III 4. 5. IX 6. (Sep)

Sphinx. eremita. cordata. I found on mountain ment. Spear ment. & Apple. and

† hergamot = Alg. Rep. 1872 p 86, fig 40. S. Enemilis. L. LXXX. 12. 11/3. 23. 24.

Sphinx *Sordidus* see *S. eximius* above.

Sphinx excaccatus Smerinthus (Lep.) I find on upper oak cherry plum not in the

39 21/14 J. XXXIX/4.

Spittle insect. see Aphrophora. (Conn. 99. 111. 12 m) 9 (lg. 2 p. 10 + 150)

Spider Trap door Spider. *Cleria nictitans*. Cy. Sep. 1873. p. 161 fig.

Spiders, Theridion & Hygrophyllum, destroy young caterpillars of Pieris rapae, & Plutella

Limniphonella. Ag Rep 1871. p 82,

Spiller. "Sick" insect. 22. Mr. Miller. 24. 1866. 37. see under head of "Sick".

Spizella, binomiale (Linn.) in mus. Collage of Traps. Alg. Traps. 1868. p. 88, fig. 74.

Apomata. 39. xxxiv/28. (Col)

Species. Anomala punicola. impure pure. Sept. 1868. p. 88

Spindle upon the surface of the shell is found of *L. alba* *holata*. *W. H. H. H.*

8. 1. 1902. A. D. 1841. 1842. 1843. 1844. 1845. 1846. 1847. 1848. 1849. 1850. 1851. 1852. 1853. 1854. 1855. 1856. 1857. 1858. 1859. 1860. 1861. 1862. 1863. 1864. 1865. 1866. 1867. 1868. 1869. 1870. 1871. 1872. 1873. 1874. 1875. 1876. 1877. 1878. 1879. 1880. 1881. 1882. 1883. 1884. 1885. 1886. 1887. 1888. 1889. 1890. 1891. 1892. 1893. 1894. 1895. 1896. 1897. 1898. 1899. 1900. 1901. 1902. 1903. 1904. 1905. 1906. 1907. 1908. 1909. 1910. 1911. 1912. 1913. 1914. 1915. 1916. 1917. 1918. 1919. 1920. 1921. 1922. 1923. 1924. 1925. 1926. 1927. 1928. 1929. 1930. 1931. 1932. 1933. 1934. 1935. 1936. 1937. 1938. 1939. 1940. 1941. 1942. 1943. 1944. 1945. 1946. 1947. 1948. 1949. 1950. 1951. 1952. 1953. 1954. 1955. 1956. 1957. 1958. 1959. 1960. 1961. 1962. 1963. 1964. 1965. 1966. 1967. 1968. 1969. 1970. 1971. 1972. 1973. 1974. 1975. 1976. 1977. 1978. 1979. 1980. 1981. 1982. 1983. 1984. 1985. 1986. 1987. 1988. 1989. 1990. 1991. 1992. 1993. 1994. 1995. 1996. 1997. 1998. 1999. 2000. 2001. 2002. 2003. 2004. 2005. 2006. 2007. 2008. 2009. 2010. 2011. 2012. 2013. 2014. 2015. 2016. 2017. 2018. 2019. 2020. 2021. 2022. 2023. 2024. 2025. 2026. 2027. 2028. 2029. 2030. 2031. 2032. 2033. 2034. 2035. 2036. 2037. 2038. 2039. 2040. 2041. 2042. 2043. 2044. 2045. 2046. 2047. 2048. 2049. 2050. 2051. 2052. 2053. 2054. 2055. 2056. 2057. 2058. 2059. 2060. 2061. 2062. 2063. 2064. 2065. 2066. 2067. 2068. 2069. 2070. 2071. 2072. 2073. 2074. 2075. 2076. 2077. 2078. 2079. 2080. 2081. 2082. 2083. 2084. 2085. 2086. 2087. 2088. 2089. 2090. 2091. 2092. 2093. 2094. 2095. 2096. 2097. 2098. 2099. 2100. 2101. 2102. 2103. 2104. 2105. 2106. 2107. 2108. 2109. 2110. 2111. 2112. 2113. 2114. 2115. 2116. 2117. 2118. 2119. 2120. 2121. 2122. 2123. 2124. 2125. 2126. 2127. 2128. 2129. 2130. 2131. 2132. 2133. 2134. 2135. 2136. 2137. 2138. 2139. 2140. 2141. 2142. 2143. 2144. 2145. 2146. 2147. 2148. 2149. 2150. 2151. 2152. 2153. 2154. 2155. 2156. 2157. 2158. 2159. 2160. 2161. 2162. 2163. 2164. 2165. 2166. 2167. 2168. 2169. 2170. 2171. 2172. 2173. 2174. 2175. 2176. 2177. 2178. 2179. 2180. 2181. 2182. 2183. 2184. 2185. 2186. 2187. 2188. 2189. 2190. 2191. 2192. 2193. 2194. 2195. 2196. 2197. 2198. 2199. 2200. 2201. 2202. 2203. 2204. 2205. 2206. 2207. 2208. 2209. 2210. 2211. 2212. 2213. 2214. 2215. 2216. 2217. 2218. 2219. 2220. 2221. 2222. 2223. 2224. 2225. 2226. 2227. 2228. 2229. 2230. 2231. 2232. 2233. 2234. 2235. 2236. 2237. 2238. 2239. 2240. 2241. 2242. 2243. 2244. 2245. 2246. 2247. 2248. 2249. 2250. 2251. 2252. 2253. 2254. 2255. 2256. 2257. 2258. 2259. 2260. 2261. 2262. 2263. 2264. 2265. 2266. 2267. 2268. 2269. 2270. 2271. 2272. 2273. 2274. 2275. 2276. 2277. 2278. 2279. 2280. 2281. 2282. 2283. 2284. 2285. 2286. 2287. 2288. 2289. 2290. 2291. 2292. 2293. 2294. 2295. 2296. 2297. 2298. 2299. 2300. 2301. 2302. 2303. 2304. 2305. 2306. 2307. 2308. 2309. 2310. 2311. 2312. 2313. 2314. 2315. 2316. 2317. 2318. 2319. 2320. 2321. 2322. 2323. 2324. 2325. 2326. 2327. 2328. 2329. 2330. 2331. 2332. 2333. 2334. 2335. 2336. 2337. 2338. 2339. 2340. 2341. 2342. 2343. 2344. 2345. 2346. 2347. 2348. 2349. 2350. 2351. 2352. 2353. 2354. 2355. 2356. 2357. 2358. 2359. 2360. 2361. 2362. 2363. 2364. 2365. 2366. 2367. 2368. 2369. 2370. 2371. 2372. 2373. 2374. 2375. 2376. 2377. 2378. 2379. 2380. 2381. 2382. 2383. 2384. 2385. 2386. 2387. 2388. 2389. 2390. 2391. 2392. 2393. 2394. 2395. 2396. 2397. 2398. 2399. 2400. 2401. 2402. 2403. 2404. 2405. 2406. 2407. 2408. 2409. 2410. 2411. 2412. 2413. 2414. 2415. 2416. 2417. 2418. 2419. 2420. 2421. 2422. 2423. 2424. 2425. 2426. 2427. 2428. 2429. 2430. 2431. 2432. 2433. 2434. 2435. 2436. 2437. 2438. 2439. 2440. 2441. 2442. 2443. 2444. 2445. 2446. 2447. 2448. 2449. 2450. 2451. 2452. 2453. 2454. 2455. 2456. 2457. 2458. 2459. 2460. 2461. 2462. 2463. 2464. 2465. 2466. 2467. 2468. 2469. 2470. 2471. 2472. 2473. 2474. 2475. 2476. 2477. 2478. 2479. 2480. 2481. 2482. 2483. 2484. 2485. 2486. 2487. 2488. 2489. 2490. 2491. 2492. 2493. 2494. 2495. 2496. 2497. 2498. 2499. 2500. 2501. 2502. 2503. 2504. 2505. 2506. 2507. 2508. 2509. 2510. 2511. 2512. 2513. 2514. 2515. 2516. 2517. 2518. 2519. 2520

Dipondylus (Col) Ag. Rep. 1851/613 more men con

Sporendonema (Empusa) muscae, a fungoid growth killing flies. Ag. Rep 1872 p. 132. (Empusa)

Spotted considor. (Holt) destroys other insects, & amongst the rest, kills bed bugs. Ag. Rep.
(1875) p. 24. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100. 101. 102. 103. 104. 105. 106. 107. 108. 109. 110. 111. 112. 113. 114. 115. 116. 117. 118. 119. 120. 121. 122. 123. 124. 125. 126. 127. 128. 129. 130. 131. 132. 133. 134. 135. 136. 137. 138. 139. 140. 141. 142. 143. 144. 145. 146. 147. 148. 149. 150. 151. 152. 153. 154. 155. 156. 157. 158. 159. 160. 161. 162. 163. 164. 165. 166. 167. 168. 169. 170. 171. 172. 173. 174. 175. 176. 177. 178. 179. 180. 181. 182. 183. 184. 185. 186. 187. 188. 189. 190. 191. 192. 193. 194. 195. 196. 197. 198. 199. 200. 201. 202. 203. 204. 205. 206. 207. 208. 209. 210. 211. 212. 213. 214. 215. 216. 217. 218. 219. 220. 221. 222. 223. 224. 225. 226. 227. 228. 229. 230. 231. 232. 233. 234. 235. 236. 237. 238. 239. 240. 241. 242. 243. 244. 245. 246. 247. 248. 249. 250. 251. 252. 253. 254. 255. 256. 257. 258. 259. 260. 261. 262. 263. 264. 265. 266. 267. 268. 269. 270. 271. 272. 273. 274. 275. 276. 277. 278. 279. 280. 281. 282. 283. 284. 285. 286. 287. 288. 289. 290. 291. 292. 293. 294. 295. 296. 297. 298. 299. 300. 301. 302. 303. 304. 305. 306. 307. 308. 309. 310. 311. 312. 313. 314. 315. 316. 317. 318. 319. 320. 321. 322. 323. 324. 325. 326. 327. 328. 329. 330. 331. 332. 333. 334. 335. 336. 337. 338. 339. 340. 341. 342. 343. 344. 345. 346. 347. 348. 349. 350. 351. 352. 353. 354. 355. 356. 357. 358. 359. 360. 361. 362. 363. 364. 365. 366. 367. 368. 369. 370. 371. 372. 373. 374. 375. 376. 377. 378. 379. 380. 381. 382. 383. 384. 385. 386. 387. 388. 389. 390. 391. 392. 393. 394. 395. 396. 397. 398. 399. 400. 401. 402. 403. 404. 405. 406. 407. 408. 409. 410. 411. 412. 413. 414. 415. 416. 417. 418. 419. 420. 421. 422. 423. 424. 425. 426. 427. 428. 429. 430. 431. 432. 433. 434. 435. 436. 437. 438. 439. 440. 441. 442. 443. 444. 445. 446. 447. 448. 449. 450. 451. 452. 453. 454. 455. 456. 457. 458. 459. 460. 461. 462. 463. 464. 465. 466. 467. 468. 469. 470. 471. 472. 473. 474. 475. 476. 477. 478. 479. 480. 481. 482. 483. 484. 485. 486. 487. 488. 489. 490. 491. 492. 493. 494. 495. 496. 497. 498. 499. 500. 501. 502. 503. 504. 505. 506. 507. 508. 509. 510. 511. 512. 513. 514. 515. 516. 517. 518. 519. 520. 521. 522. 523. 524. 525. 526. 527. 528. 529. 530. 531. 532. 533. 534. 535. 536. 537. 538. 539. 540. 541. 542. 543. 544. 545. 546. 547. 548. 549. 550. 551. 552. 553. 554. 555. 556. 557. 558. 559. 560. 561. 562. 563. 564. 565. 566. 567. 568. 569. 570. 571. 572. 573. 574. 575. 576. 577. 578. 579. 580. 581. 582. 583. 584. 585. 586. 587. 588. 589. 590. 591. 592. 593. 594. 595. 596. 597. 598. 599. 600. 601. 602. 603. 604. 605. 606. 607. 608. 609. 610. 611. 612. 613. 614. 615. 616. 617. 618. 619. 620. 621. 622. 623. 624. 625. 626. 627. 628. 629. 630. 631. 632. 633. 634. 635. 636. 637. 638. 639. 640. 641. 642. 643. 644. 645. 646. 647. 648. 649. 650. 651. 652. 653. 654. 655. 656. 657. 658. 659. 660. 661. 662. 663. 664. 665. 666. 667. 668. 669. 670. 671. 672. 673. 674. 675. 676. 677. 678. 679. 680. 681. 682. 683. 684. 685. 686. 687. 688. 689. 690. 691. 692. 693. 694. 695. 696. 697. 698. 699. 700. 701. 702. 703. 704. 705. 706. 707. 708. 709. 710. 711. 712. 713. 714. 715. 716. 717. 718. 719. 720. 721. 722. 723. 724. 725. 726. 727. 728. 729. 730. 731. 732. 733. 734. 735. 736. 737. 738. 739. 740. 741. 742. 743. 744. 745. 746. 747. 748. 749. 750. 751. 752. 753. 754. 755. 756. 757. 758. 759. 760. 761. 762. 763. 764. 765. 766. 767. 768. 769. 770. 771. 772. 773. 774. 775. 776. 777. 778. 779. 780. 781. 782. 783. 784. 785. 786. 787. 788. 789. 790. 791. 792. 793. 794. 795. 796. 797. 798. 799. 800. 801. 802. 803. 804. 805. 806. 807. 808. 809. 810. 811. 812. 813. 814. 815. 816. 817. 818. 819. 820. 821. 822. 823. 824. 825. 826. 827. 828. 829. 830. 831. 832. 833. 834. 835. 836. 837. 838. 839. 840. 841. 842. 843. 844. 845. 846. 847.

1870-71 127 pgs 39. 59. 14/22 (Oct)

Spotted. *Pelidnota* (Col) *Pelidnota punctata*. Ins. injures grape vines. D.S. 12/19, (Col)

It is a good thing to have the habit of carrying up suitably when laid upon the back.

[illegible]

Snapping beetle. J.G.x/5. (Col)



- Squash bug, *Anasa*, *Gonocerus*, *Coreus*, *tristes*. (Hom.) Ag. Rep. 1866, p. 557. Remedies. 1870. 897.
 { See *Anasa tristis*, SS. II/14 (Holt.)
- Squash lady bird, or beetle, (Col.) injures foliage of Squash, Ag. Rep. 1862, p. 579. remedies. & 1866 p. 43.
 { 1875 p. 116. & destroyed by *Stenobius deane*. Hol. *Epilachna borealis* SS. XXXIX/25 (Col.)
- Stag beetle, see *Lucanus dama* (Col.) SS. X/16 (Col.)
- Staphylinidae. (Col.) Ag. Rep. (Rathvon) 1861, p. 596. fig 20. eat fungi, flowers, &c. Some of them are
 { parasitic in the nests of other insects. Col. destroy worms, slugs, snails, caterpillars.
 { (Col.) 1865 p. 91. — destroy other insects. 1866 p. 39. — eat decaying animal & vegetable
 { substances, fungi, flowers, &c. 1868 p. 82. — 1870 p. 66. (Col.) Example *Cephus ater* SS. 29/20
- Staphylini. Ag. Rep. 1862, p. 372 — 1865, p. 116. ex *Crochilus villosus*. SS. XXIX/27 example.
- Staphylinus, maculosus, (Col.) Ag. Rep. (Rathvon, Ag. Rep.) 1861, p. 596. fig 19. feeds on
 { decaying animal & vegetable matters, fungi, manure, &c. SS. XXIX/22 (Col.)
- Staphylin. *Stenobius deane*. Ag. Rep. 1868 p. 181. (Col.) SS. X. VII/16 (Col.)
- Steel blue grape leaf beetle. *Graphera* (Hartig) *chrysoidea*. injures foliage of Grapes, hives, &c.
 { black under. &c. Ag. Rep. 1863, p. 576. remedies. see *Graphodora chrysoidea*. SS. XXV/9 (Col.)
- Stelidota geminata, (Col.) feed on decaying vegetable & animal substances, & hives on grapes
 { previously injured by *Carides inaequalis*. Ag. Rep. 1863 p. 83. SS. XXXVI/25 (Col.)
- Stenocorus putator, *Elaphidion villosum*. Oak puner. L. cuts off twigs of Oak, apple,
 { peach, &c. &c. &c. &c. from the inside. Ag. Rep. 1871 p. 72. fig 2. *Populion villosum*.
 { SS. X/13 (Col.)
- Stenohelmatus, (Col.) (Rathvon) Ag. Rep. 1862, p. 579. fig 16. See *Stenobius*. (Col.)
- Stenurus, (Col.) Rathvon. Ag. Rep. 1862, p. 579. See *Stenobius*. (Col.)
- Stenoptera (*Smilia*) *inermis*. (Col.) frequent near grass, grass, &c. &c. on Oak, &c.
 { *chrysosaria*. Ag. Rep. 1876, p. 116. *Stenobius inermis*. SS. II/34 (Hom.)
- Stenoptera, see or *Stenobius*. (Col.) *Stenobius*. Ag. Rep. 1866 p. 32. honey comb want
- Stenobius deane. (Col.) destroys *Epilachna borealis*, or the squash lady beetle. Ag. Rep. 1870.
 { p. 116. fig 10. — beneficial. (Syn 3 *anchorage* Sal.) SS. VI/29, II/25, & IV/20 (Holt.)
- Stenobius *inermis* (Col.) destroy *Epilachna chrysosaria* 10 linear. Ag. Rep. 1874 p. 123.
 { common name "Barnard's Soldier, bug" destroys *Papilio asteris*, & web worm
 { *Hyphalantia textor* (Lep.) Colorado potato beetle, & other insects. Ag. Rep. 1875,
 { p. 119. fig 11. SS. II/20 (Holt.)
- Stenobius *inermis*. (Col.) destroys of Harvest flies (*Chironomus* called locusts) to its hole
 { in the earth, or mud, & hives them. to form food for its young. Ag. Rep. 1866 p. 43
 { 1867 p. 67. SS. III/19 (Holt.)
- Stenobius *inermis* (Col.) *Stenobius* SS. I. VII. 36 & VIII/22 & IV/14 (Holt.)
- Stenobius *inermis* (Col.) *Stenobius* SS. I. VII. 36 & VIII/22 & IV/14 (Holt.)
- Stenobius *inermis* (Col.) *Stenobius* SS. I. VII. 36 & VIII/22 & IV/14 (Holt.)
- Stenobius *inermis* (Col.) *Stenobius* SS. I. VII. 36 & VIII/22 & IV/14 (Holt.)
- Strachia (*Murgantia*) *hustoniensis* (Holt.) *Horlequin* Cabbage bug. very destructive to the cabbage
 { especially in the Southern States, injures also summer leaves, & cruciferous plants,
 { Ag. Rep. 1867 p. 71. fig — 1870 p. 90 habits & remedies 1871 p. 64 fig 15. (good)
 { 1875 p. 116, fig 5. is destroyed by *Leptoglossus phyllorhynchus* (see SS. II/31) *Murgantia*
 { *hustoniensis* SS. II/22. (Holt.) (see also *Strachia*)
- Strangalia *luteicornis*. (Rathvon) Ag. Rep. 1861, p. 620. fig 90. L. live in stumps, & in flowers
 { SS. XXII/13 (Col.)
- Stratiomidae, Ag. Rep. 1863 p. 317.
- Stratiopes. *arabicus* (Col.) hibernates in sandy fields, in N.J. Ag. Rep. 1868 p. 59. SS. XX/22, XIII/20 (Col.)
- Strawberry, saw fly. (Bym.) injures foliage *Empyrides maculatus* Ag. Rep. SS. XX/22, XIII/20 (Col.)
- Strawberry blossom weevil. (Col.) *Anthonomus signatus* Ag. Rep. 1871 p. 73. fig 3.
- Striped bug. *Diabrotica vittata* *Palmeria* Syn SS. XX/13 (Col.)
- Striped Cricket (Bull.) *Chalcid vittata* see *Memobius*. SS. VII/18 (Bull.)

Stylocidus, *Stylops*. Col. L. parasitic in the body of "Red worms". IS. XXX, 15. (Col.)
Styloga *ovatus*. Lich; *Osmia* *acervata*. *ulma*. *annulosa*. *p. ater* on animal &
 {vegetable substances, traps poison & other remedies *Pyrethrum* & root of *Pota*
unida *Phyllosacca decandra*. Ag. Rep. 1874 p. 138 fig 4 (Syn. *Halla*) *Styloga*
IS. 11346. 4 VIII 12. (Ostr.)

Sylvanus. see *Silvanus*.

Synchora punctata. (Coc) L. found in better Cats stumps. Ag. Rep. 1866. p. 101 fig 173. IS. XXVII 7. (Col.)
Synxylon (*Apate*) *basilare*. (Col) L. in wood of hickory & Elm. Ag. Rep. 1868. p. 99, fig 155.
 {*Synxylon*. IS. XIII 1. (Col)

Synxylon *sordidulum*. (Col) Eu. stems of unhealthy grape vines. Ag. Rep. 1865 p. 91.

Syrphus *luc.* *Arid* *Escator*. (Horn) Ag. Rep. 1866. p. 32. (Hym)

Syrphus (*luc.*) L. destroys plants like *Achilles*. (Horn) Ag. Rep. 1866 p. 44. Exam. in. *Syrphus*
 {*lucatus*. IS. III 21. (Lep.)

Syrphus (*luc.*) probably found *naeoe angustioris* in their bodies. Ag. Rep. 1866. p. 102. (Lep.)

Syrphus (*luc.*) L. destroying plant like *Alfalfa*. Ag. Rep. 1864. p. 84. fig 8. — destroys Cotton lice.

{ Ag. Rep. 1865 p. 112 pt x fig 5. example. *Syrphus geminatus*. IS. III 20. (Lep.)

Syrphus (*luc.*) *erosa*. destroys other insects. Ag. Rep. 1873. p. 126 fig 35. *Syrphus erosus*.

{ IS. III 13. (Horn)

Systems of instructions on which museum is based. Ag. Rep. 1865. p. 35.

Systena blanda. (Col) injure foliage of Maple. Ag. Rep. 1873. p. 151, fig 1. IS. XXVIII 5. (Col)

Sabamidae. Ag. Rep. 1865 p. 276. — 1868. p. 317. — 1872. p. 129.

Sabana atrata. large Black horse fly. (*luc.*) bites on stings horses cattle &c. Especially
 {in woody districts. Ag. Rep. 1872. p. 129. fig 15. *Sabana atrata*. IS. L. 12/35 1x/10 1.11/15/16.

Sachina (*luc.*) parasitic in other insects. Ag. Rep. 1866 p. 46.

Sachina (or *Sarcophaga*?) (*luc.*) destroy. Red legged Grasshopper, *Sarcophaga* & *mur. rubra*.

{ & C. *Spinosus*, or the western grasshopper &c. Ag. Rep. 1867 p. 66.

Sachina L. *Goryphora* (*luc.*) destroys *Goryphora Chrysomela decuminate*. Ag. Rep. 1871. 74

{ 1874 p. 123. Example. *Sachina*. IS. X 23. (*luc.*)

Sachina viridis. (*luc.*) destroy caterpillars of *Myrica* (*luc.*) *imperialis*. Ag. Rep. 1866 p. 44.

{ IS. IV 16 (*luc.*)

Sachina (*luc.*) Beneficial to the agriculturist, as destroying noxious caterpillars & other insects.

{ Ag. Rep. 1865. p. 276 — 1872. 131. — &c. (*luc.*)

See plant with plate cited by IS. article by L. 12 Ag. Rep. 1857. p. 166.

Salamona ampeloides (Horn) frequents *Ampeloides*. & Grape. Ag. Rep. 1876 fig 12. IS. 11 25 (Horn)

Salamona (*Entilia*) *concaua* (Horn) IS. 11 (Horn)

Selas (Horn) Europe said to destroy the eggs of *Notonecta* &c. Ag. Rep. 1875 p. 132 example.

{ Eu *Selas laeviusculus*. IS. X 31. (Hym)

Selachinus & (Col) Ag. Rep. 1868 p. 117. (Col)

Selachinus bilineatus. (Col) L. useful as destroying other insects. Ag. Rep. 1868. p. 96. fig 130.

{ IS. XXIX (Col)

Selachinus fuscus. & *lucatus*. (Eumet) Col destroy the soft bodied *Conca* or *Saw flies*. Ag. Rep.

{ 1865 p. 91 (Col)

Selachinus lucatus. see above under *fuscus*. Col

Selachinidae. (Col) more mention Ag. Rep. 1868. p. 96. — found on Snow in Sweden & France.

{ 1868. p. 96.

Selenionidae. (Col) in fungi which under bark & in decaying vegetable substances.

{ Ag. Rep. 1868 p. 100. (Col)

Selenion *Selenionellus* *mollis*. (Col) mealworm. destroys flour, meal, scale bread; &c

{ ship biscuit. & *trav.* with remedies. Ag. Rep. 1863. p. 549. 1868. p. 100. fig 161.

{ see *Selenionellus*. IS. XXVI 15. IS. 13/3 (Col) (damaged flour)

Selenion. *obscurus* (Horn) habits as above but prefers sound & dry meal flour bran ship biscuit &c
 (Ag. Rep. 1868 p. 100. *Selenionellus obscurus* IS. IS. 13/3.)

.

$$v(x) = f(x)$$

Throscus. (Col) Ag Rep 1868 p 112. —

Phycitella cinnamomea *Boecklin* *originum*. Ag. Rept. 1855 p. 79. p. vi, 1858. inquest
"Cotton Blight", *Arbor vitae*, *Sorbus*, *Hemlock spruce*, *Juniper*, *Figworts*, *Malva*, *Cedars*,
"Basket worm", "Case Worm", or "Bangworm" remedies, 1866, 1852. — 1866 p. 61. 97.
Is changed by a parasite *Hym. Cryptus incusator* 1871 115. *Thuridacterus*.
1871 xii 1. to 5. Sept.

Thysanaura. (Orth.) see *Poduridae*. 29 ex *P. villosa* VI/7. (Orth)

Thysanotricha! Orth see Thrips. 33 ex. vi/o. (Orth)

Foxes Bird (Orizaba, Mexico). Being bird etc. Ag. Rep. 1874 & 1876. ex *Leopodomys. ag. n.* 28 x 1 1/2

Sicks on Sheep. (Lg. Tex. 1824, p. 363, ⁹ nem. da. 9^e (Vick))

Tickling Ball. See *Monochlamys titillator*. L. in mood & form. (Kathvon) Ag. Rep. 1861
 \$ p. 613. fig 65, 66, 67. ES. XVII/1. (Col)

Tiger beetle. See Cicindela Megacephala. Tetrachu. (Col)

* *Tetraneura*. *Hemiteles sanguinolentus*. (Co.) m. nelsoni. Cy. Rep 1868 p. 103 fig 178. probably
parasitic on H., or their food. *Tetraneura*. DXXXII (1). (Co)

Tilli. (Col) never mention. 119 Sep. 1863. p. 97. 112. See Alexis.

Tillus. amblyans. (Pai Pai) L in Cat. No. 1862 h 07. (Col)

Tilius elongatus (Col.) (Ew.) destroy the larvae of wood eating insects. Ag. Rep. 1866 29. (Col.)
Tilius undulatus (Col.) on cymatoderm. 1868 40. Pl. xv. 20. xlv. 44. (Col.)

Timber beetles. see Lymerelson. 49. Rep. 1868. p. 98. (Col.)

Junco grandis. Cpl. Grand male. Half. Tailfeathers mature. Found in old cotton. Long, fresh.
 (See card. On file 1884-4 65 male 4. * See *Actolphe*, erroneously named by

Tonia fasciata (L.) *clothes moth* cat. etc. from *hullers* & *see remedial* Ag. Rep. 1864 p. 55.
 5 DB LXVI (4) (Sep.)

Xingis arcuatus Capoin, 1901. *Syst. Zool.*, 50: 67. *Quart. J. Mus. Nat. Hist.*, 1896.
 {fig 36. p 126. (Holt) } 9.IV/2. (Holt)

Tingis juglandis. Nutt., sachs. Sup. n. Fruit and Birch. Himm. v. Ag. Rep. 1875, p. 126.

Tipularidae & *Tipulariaceae*. Ag. Rep. 1868. p. 317. & 1872. p. 178. (Tip.)

Tijula maculosa (Lep.) Crane fig. (Europe) mere mention. Ag. Rep. 1872. p. 128. (Lep.)

Sipula alereacea. (Dep. Ex) Crans fly. destroys roots of grain. Frax. flowers. Vegetables &c. kalis.
 { remedies 4th. Age. (Dep. 1872. p. 128. 1912. D. L. 1110. J. X 27. (Dep.) (Surgeon)

Tigula trilevis. (Lef.) 1844 p. 166. (Lef.)

Goats as destroyers of insects. eat even *Heliothis vires* (*Epicauta vittata*) squash bug (*Anasa*
{*tristis* G.) C. G. Oakes, 1870, p. 90.

Tobacco worm, or catenular. Fly or Sphinx (Lep) *Macrosila carolina* L'yr. remedies.

{ poisoning with Cobalt. (blue stone) Ag. Rep 1864 p 549. — 1869, p 296. — 1873 p 158.
{ destroyed by Bonet, maps. Ichneumon, & Microgaster congregata, &c. 1873 p 152.
{ U.S. L 11/6. I x 6 1/2. (Lep)

Tobacco Leaves used as a wash to preserve houses from flies. Ag Rep 1872, p 132.

Tolype larina (Lep.) Dark cluster perianth Phryganetia blanda (syn. *actinotarsus*) Blm.
Tolype *var. actinotarsus*, or few (imp.) *Macronia quinque maculata*. *Letia* *but* *Alingay*
 for *horionina* *persons* *sa.*

Ug. Sept 15th 1873. 39 - 1873. 138 1874 p. 2. 39 III/4.5. 1874/6.

Tomicus macul. Abts bank built, Col. F. Ingram, bank a apple tree. Ug. Exp. White House, 52.
 YG xv/16. 1861

Tooth ligged *Buprestis*, see *Chrysobothris dentipes* Ag. Rep. 1868, p. 92. L. in Oak wood
 591/18. (Col.)

Tortoise. beetle. see Cassida. Ye. (Col)

Tortricidae (Lep.; Agr., Rep., 1868, p. 315.

Yontia (Lam.) rolls up leaves at cotton. 14. Sep. 1824. p. 61.

72011

Trox, *exiguus* (Hym.) destroys the parsley worm. (*Dephis asterias*) Ag. Rep. 1866 p. 61.

Trox, *terrastis* (Col.) more mention. Ag. Rep. 1866 p. 87. TS VII/21. (Col.)

Trypeta, *pomonella*. Upper margin of leaf. *Trypeta* is the fruit. Ag. Rep. 1867 p. 72. TS. IX/14. (Hym.)

Trypetidae. Ag. Rep. 1872 p. 134. (Lep.)

Trypeta lay in dung. (Col.) *Trypeta* is the name of the insect which it
wells under proper conditions. *Trypeta* is the name of the insect. Ag. Rep. 1861 p. 600.

Turnip, origin of. by ST/5/aid. Ag. Rep. 1866 p. 238.

Turnip beetle (Cyn) remedies. 1866 p. 577. (Cyn)

Turnip fly Prevention of. Ag. Rep. 1860 p. 13.

Turnip moth. *Lepidoptera*. the caterpillars of which have long tufts or tussocks of hair.

See back or sides. See *Lophocampa* &c

Tussock moth. *Orgyia leucostigma* (Lep.) 1866 p. 552 remedies &c TS Orgyia. TS IX/510

Tussock moth. *Orgyia leucostigma* (Lep.)

Tussock moth. *Orgyia leucostigma* (Lep.)

Tussock moth. *Orgyia leucostigma* (Lep.)

Tussock moth. *Orgyia leucostigma* (Lep.)

Tussock moth. *Orgyia leucostigma* (Lep.)

Tussock moth. *Orgyia leucostigma* (Lep.)

Tussock moth. *Orgyia leucostigma* (Lep.)

Tussock moth. *Orgyia leucostigma* (Lep.)

Tussock moth. *Orgyia leucostigma* (Lep.)

Tussock moth. *Orgyia leucostigma* (Lep.)

Tussock moth. *Orgyia leucostigma* (Lep.)

Tussock moth. *Orgyia leucostigma* (Lep.)

Tussock moth. *Orgyia leucostigma* (Lep.)

Tussock moth. *Orgyia leucostigma* (Lep.)

Tussock moth. *Orgyia leucostigma* (Lep.)

Tussock moth. *Orgyia leucostigma* (Lep.)

Tussock moth. *Orgyia leucostigma* (Lep.)

Tussock moth. *Orgyia leucostigma* (Lep.)

Tussock moth. *Orgyia leucostigma* (Lep.)

Tussock moth. *Orgyia leucostigma* (Lep.)

Tussock moth. *Orgyia leucostigma* (Lep.)

Tussock moth. *Orgyia leucostigma* (Lep.)

Tussock moth. *Orgyia leucostigma* (Lep.)

Tussock moth. *Orgyia leucostigma* (Lep.)

Tussock moth. *Orgyia leucostigma* (Lep.)

Tussock moth. *Orgyia leucostigma* (Lep.)

Tussock moth. *Orgyia leucostigma* (Lep.)

Tussock moth. *Orgyia leucostigma* (Lep.)

Tussock moth. *Orgyia leucostigma* (Lep.)

Tussock moth. *Orgyia leucostigma* (Lep.)

Tussock moth. *Orgyia leucostigma* (Lep.)

Tussock moth. *Orgyia leucostigma* (Lep.)

- Use a cent. Heart worm. Canadian name for *Pieris rapae*. (European white cabbage
 butterfly caterpillar. from its injuring the heart or interior of Cabbages &c. 39.
 C. 18 C. 11/30 In E. 14. 39 (Sep.)
- Useful (Hym) Ag. Rep. 1872. p. 132. *Lespedae*. Ag. Rep. 1866. p. 43. (Hym.)
- Use hoppers. see *Eutigeria erythronera*. 39
- Virginian *Suprestis*. see *Suprestis Onocleophora virginica*. *virginianus*. *L. injures wood*
 of pine. Ag. Rep. 1861. p. 607. fig 53. 1868. p. 91. fig 89. *C. virginianus*. 39 1/19 (Ex)
 Vinegar remedy recommended for the destruction of insects by the Imperial Soc. for
 Horticulture of the Othone. in the proportion of one part of vinegar to 9 parts
 of water. Ag. Rep. 1865. p. 92.
- Lucilia inanis*. (Det) *inanis*. Ag. Rep. 1849. p. 330. *L. ex* *Lucilia zonaria*. 39 11/31 (Ex)
 Walking stick insects. see *Spectrum*. *Diaperomera*. &c. *phrasmodae*. *Orth*. 1874. p. 133. 39
 Fed on leaves. Flies. Insects resemble wings.
 Ex. *Diaperomera Amorata*. 39 1/14. (Orth)
- Walnut. leaves used as a wash to Root Rots from horses. Ag. Rep. 1872. p. 132.
- Wasps? eat young tobacco worms. see *Macrosila carolina*.
- Wasps. Hornets. & yellow jackets. Fed on fruit of pear &c. *Waller*. Ag. Rep. 1866 p. 516. Hym
- Wasps. (Hym) *Urochidae*. to destroy. Remedies. 1864 p. 56. *W* (Hym) — injure fruits
 Set also destroy Rots. 1866. p. 43. — brood bred in body of *Chalcidophora* (Cec) *Stylops*.
Meloe angusticollis. — Ag. Rep. 1868. p. 102.
- Wasp, wood wasp. see *Urocerus*. Ag. Rep. 1863. 276. Hym.
- Water beetles. (Cec) see *Dytiscus*. *Hydrophilus*. &c. Fed on aquatic insects &c. *Waller*
 Spawns. Perjurious in fish breeding establishments.
- Water beetles. adapted for aquaria. or otherwise. Ag. Rep. 1864. p. 459. (Cec)
- Water bugs. *Heteropterous* insects inhabiting water. (Hym)
- Water fly. *Phryganea*. &c. (Hym) Ag. Rep. 1866. p. 40 ex 39. 1/16. In 1/18. (Hym)
- Water measures. Hek. see *Hydrophilidae*. (Cec) (Hym) &c. ex *Coris conformis*. 39 1/18
- Water scorpion (Hek) see *Nepa*. &c. 1875. ex *Nepa apiculata*. 39 1/10. (Cec)
- Water skimmer. (Hek) see *Zettis*.
- Wax insects of China. *Diata (Cecid)* *umbata*. Ag. Rep. 1861. p. 57. (Hym)
- Wax moth or Bee moth. (Sep) see *Galleria cereana*. 39 1/14. 39 1/17. (Hek)
- Weaver. or Boll weevil worm. (Sep) *Hyphantria* *Texor*. 39 2/18. 3. 16. 39 1/18. 13. (Sep)
- Western grasshopper. see *Calatrenus opretus* (Orth) 39 1/16. 39 1/11. (Orth)
- Weevil. grain. see *Calandra vomotifunctata*. (*Sitophilus granarius*) 39 1/14. 2 (Cec)
- Weevil. Hunter. (Cec) *Eats holes in leaves of maize*. Ag. Rep. 1863. p. 573. *apinis*
Sphenothorus Zeae. 1870. p. 63 fig 10.
- Weevil. see *Curculionidae*. (Cec) & incorrectly. *Diplosis Acidomyia tritici*.
- Weevil. red see *Diplosis tritici*. 1872. 126 so called incorrectly in *Cher* &c.
- Weevil. Wheat see *Calandra remolipunctata*. *Sitophilus granarius*. Ag. Rep. 1865. 91 & 39 1/14. 2.
- Weevil. Rice. see *Calandra oryzae*. *Sitophilus* 1849 p. 334. 1857. p. 71. p. 8. 1861. p. 603.
Calandra. 39 1/11. (Cec)
- Wheat midges. see *Diplosis tritici*. Ag. Rep. 1864. p. 362. probably destroyed by *Mormitea*
Calculus typhaceus (pugnas) 39 1/14. (Hek) *Diplosis tritici*. 39 1/10. 11. (Hek)
- Wheel bug nine pronged. (Hek) feeds on other insects. *Pronotus cristatus* *Stadman* *novus*.
novus. 1864. p. 546. & 1875 p. 129. fig 41. *Pronotus cristatus*. 39 1/14. (Hek)
- White ants. see *Termites*. (Hym) Ag. Rep. 1864. p. 545. Ex *Termites*. *Kemp*. 39 1/18. 10. (Hym)
- White climbing cricket (Orth) see *Ocanthus nives*. 39 1/14. 2. (Orth)
- Whorleg. see *Gyrinus*. *Donatus*. (Cec) ex. 39 1/14.
- White grub. *L.* of *Laetosterna*. *Phyllophaga*. &c. White grub parasite *Rila* *Ch. Lep*. 1874.
- White necked pine beetle. see *Tichelonycha ulmicollis*. (Cec) 1868. p. 87. 39 1/13 (Cec)
- White pine weevil. see *Pissodes strobi*. 39 1/11. (Cec)

- Wilder, silk producing spider. *Ag. Rep.* 1866. p. 37.
- Willow, Black. saw fly. *Pematus ventralis*. *Ag. Rep.* 1873 p. 255 - hellborn recommended. (Hym.)
- Wine worm, of *Canapel* is *Elater obscurus*. *Ag. Rep.* 1861. p. 608. — is the larva of an *Elater* { with remedies. *Ag. Rep.* 1863 p. 566. — destroyed by baiting with sliced potatoes ever-
day & destroying all found under moths — as they feed on vegetable roots &c. (G.)
1868 p. 93. — destroyed by sowing 6 bushels of lime "Machi" *Ag. Rep.* 1867 p. 441.
Example *Ag.* - XI/1. 46. *Corymbules*. Col.
- Wood boring or wood eating insects, destroyed by *Ephraates imitator*. (Hym. *Ag.* 1/20 Q. VI/13 &.)
& *Braccon*. (Ex *Ag.* VII/31. Hym.) *Ag. Rep.* 1866 p. 41. The larvae are also said to be
destroyed by Tilleus, *Thanasimus*, *Opilus*, *Hydroporus* &c. (C.) see *Ag. Rep.* 1865.
p. 98 (Col.)
- Woolly apple tree louse. see *Briosoma lanigera*. — III/21. Hym. *Ag.*
*Woolly see *Timea granellus*, injures wheat & grains. *Ag.* IX/1. C. 12. (Cep.)
- Woolly *Arceuthobium* (Col.) *Arceuthobium*, *Catalpa*, *lanigera*, pear foliage. *Ag. Rep.* 1860. p. 315. *Col. alb. a.*
{ *lanigera* *Ag.* XII/17. (Col.) (see 1868. p. 89. also)
- Woolly Bears. (Lep.) caterpillars of *Arctia* &c. as presenting a rough hairy appearance. Lep.
Worms earth. destroyed by *Staphylinidae*. (Col.) *Ag.* 1865. p. 91. — forms, food for *Elater*
{ *Lampis*, *furcata* & lignoring bug. *Ag. Rep.* 1868. p. 96. — eaten by *L. tetractis* &
ginnia. 1870. p. 65. — see also *Limbricaria*. 1871. p. 81.
- Worm earth. Japanese see *Megacolea* or *Ponichaeus* *Ag. Rep.* 1871. p. 82.
- Worm Cel. of *L. Fish*. *Ag. Rep.* 1871. p. 81.
- Worms in horses. remedy. *Ag. Rep.* 1860. p. 85.
- Worms. (Worm holes) tumors or abscesses under the skin of cattle caused by the larvae
{ of *Hypoderma bovis* or the star bot fly. *Ag. Rep.* 1872. p. 130. *Ag.* VII/35 & VI/37. (Lep.)
- Xanthocera* (Orth.) (Ratun) *Ag. Rep.* 1862. ? & milk meadow.
- Xia terminalis* (Orth.) said to be destroyed by *Galgulus oculatus*. (Hist. *Ag.* 28.) see *Inductus*.
{ *Ag.* III/6. (Orth.)
- Xylorhiza sinuata* (Cn.) (Euc.) injures branches of grape. *Ag. Rep.* 1860. p. 94 (Col.)
- Xylorhagus*. *Ag. Rep.* 1865. p. 92. m m. (Col.)
- Xylopinus saprodisoides* (Col.) in black oak stumps. & under bark. 1865. p. 100. fig 160.
{ *Ag.* XVI/34. (Col.)
- Xyloryctes satorius*, (Cn.) Ins. taken at root of sweet gum. & Ash. *Ag. Rep.* 1868. p. 89. fig 79
{ injurious to Ash. 1873. p. 152. fig 2. *Ag.* XVIII/15. XLII/45. Cn.
- Yellow catenular? of L. *Ag.* (Lep.) *Ag. Rep.* 1855. p. 83. (Lep.)
- Yellow jacket (Hym.) *Van. Vespa diabolia*. feed on fruit of pear, &c. Uhler. 1860. p. 316.
{ *Ag.* VII/21. (Hym.)
- Yellow. disease of the peach. prob. of fungoid origin. & not caused by insect. *Ag. Rep.*
{ 1863 p. 375.
- Zabrus gibbus*. (Col.) (Europe) L & I said to injure grain *Ag. Rep.* 1855 p. 110. 1865 p. 529.
{ 1863 p. 565. — 1868 p. 80. 105 &c.
- Zenica*. (*Camdatus*) *pecca* *Ag. Rep.* 1865 p. 94. 105. found under bark. *Zenica pecca* *Ag.* XX/13 (Col.)
- Zonitis atypennis* (*hemisphaerica*) 1865. p. 103. O. (Col.) *Ag.* XXVII/21. XLII/68. Col.
J. J. Gwyn

by destroying noxious insects

- Aleochara* (Col.) antomyzæ. destroys
Anthomyia brassicæ. (Dip.)
Ammophila gryphus. (Hym) destroys caterpillars.
 (Lep.) (Lep.)
Anatis (Coccinellæ) to punctator (Coc) destroys
 { Cotton Aphides (or plant lice) (Hym)
Anthrenus (Hec) destroys small insects. -
Antrenæ (Dip) destroys Chrysids of Lepidop.
 Ants. (Hym) destroy caterpillars, of grass
 worm, &c when injured. (Lep.)
Aphidius (Hym) destroys Aphides. (Hom)
Aphidius (Hec) destroys other insects & also
 { Killer honey bees (Hym)
Asilus. misauriensis &c (Dip) destroys
 { Honey bees, & other insects. (Hym)
Asilus sericeus. (Dip) destroys other insects.
Aspilota (Dip) destroys Aphides. &c (Hom)
Bembex (Hym) destroys flies (Lep)
Brachinus (Col) said to destroy insects.
Brachytarsus varius. (Col) destroys coccis,
 { on pine - Europe (Hom) ?
Bracon (Hym) said to destroy wood boring
 { insects. (Col)
Brontes (Col) said to destroy Scolytus, and
 { Postoryctes in Europe. (Col)
Calosoma, calidum & scutellator (Col) destroy
 { other insects.
Campyloneura (Cephus) utripennis (Hec) destroys
 { Euphrasina, or vine hopper (Hom)
Campophiles, spumatorius (Col) Europe said to
 { destroy Postoryctes in wood (Col)
 x *Carabus* ligatus &c (Col) destroys caterpillars,
 { on Pontia brassica &c (Lep)
Coraphron (Hym) destroys Cecidomyia destructor
 { (or Hæmon (Lep) (Dip)
Chalcis ? (Hym) destroys Chrysobothris femor.
 { ata &c (Col)
Chilocorus bivalvatus. (Col) destroys coccis
 { on orange. &c (Hom)
Chrysopa (New) destroys eggs of Anthomyia,
 { Apharum, Aphides & other insects.
Cicindelidæ (Col) destroy other insects.
Cleonymus chilocoræ (Hym) destroys
 { Col. Chilocorus americana (Col)
Cimicidæ (Col) destroy wood boring larvae
 { on &c (Col & Hym)
 19th Nov Sep 29th 1877.

- Homocidus* (New) destroys other insects.
Leptodermis (Cec) Col. destroys Aphidids, &c. (How)
Homocidus & *Leptodermis* (Hym) destroy Tobacco worms,
 & other insects. (Lep &c.)
Hydrophilus, water insect (Cec) said to destroy
 other insects.
Hypophloeus (Col) said to destroy insect in
 wood.
Inastemma (Hym) destroys Hessian fly,
Cecidomyia destructor (Dip)
Schnecumon flies (Hym) destroy Unisate.
Sigraulus, *Ceraloma*, *Pyrocoria*.
 (V. Lep)
Larrula argentata (Hym) destroys cricket;
 {Orth
Lebis grandis, & Col destroys Chrysomela.
 {Longphora (Col.)
Leptoglossus {*philoporus* (Hec) destroys Murgon
 {*hispanicus* (Col) destroys bag (Hec)
Lebellulidae, Oregon flies (New) destroy insects.
Lygæidae (Hec) destroy other insects.
Lucanus dema (Col) destroys soft bodied insects.
Macroglanis (Hym) destroys *Cecidomyia destructor*
 {*tor.* or *Hessian fly* (Dip)
 x *Diapheromera*, or *Mantis* (Orth) destroys other
 insects.
Melanolestes (Hec) destroys other insects.
Meloe, is used in holes of bees, wasps, &c.
Meropis *graminicola* (Hym) destroys Rice
 {*vacill.* *Calandra mixta* (Col)
Microgaster *congregatus* (Hym) destroys L. Mac-
 {*rossi*, *caroline*, &c. (Lep)
Midas, *patens* (Dip) feeds on other insects.
Mylus cinctus (Hec) destroys Chrysomela
 {Longphora, 10 lineata. (Col)
Mommidea *taphaca* (Hec) destroys Aphosis.
 {*initia*. Wheat midge (Dip)
Nepa & *Notonecta*, water insects (Hec)
 {destroy other insects.
 x *Myrmelcon* (Ant Lion) New, destroys other
 insects.
 x *Onthion*, *macrurum* (Hym) destroys Paty-
 {*semia*, *caerulesca* (Lep)
Pachymerus, *calatrator* (Pyri) destroys
 {*distalis* *initia* Wheat midge (Dip)
Parysachus *elongatus* (Col) destroys Chrysomela.
 {Longphora 10 lineata. (Col)
Pentatoma (Hec) destroys caterpillars (Lep &c.)
Phryganeon, *planosae*. (Hym) destroys -
 {*volupe* *larvæ*. (Lep)
Phymata *crassa* (Hec) destroys other insects.
Pirates *bequillatus* (Hec) destroys bed bugs (Hom)
- Platygaster* (Hym) destroys *Isosoma hordei*.
 {*gaint*, *isomus* (Hym)
 " {destroys *Cecidomyia destructor*;
 {or *Hessian fly* (Dip)
Podisus, *cyricus*, &c. (Hec) destroys Chrysa
 {*rubra*, *Doryphora* 10 lineata. (Col)
Ponera (Hym) destroys *Construcius nem.*
 {*phar*, or *Plum mevis*. (Col)
Psocids, (Col) destroys other insects.
Psocids *rubiginosus* (Hym) destroys L. of
 {Chrysomela, 10 lineata. (Col) &c.
Prionotus {*cristatus*. (Hec) *Peduncus*, *novenarius*,
 {destroys other insects.
Proctacanthus *bestioides* &c. destroys Hic bee
 {*phaladelpheus*. &c. " " (Dip)
Pteromalus (Hym) destroys Chlorops. Dip &
 {*Isosoma hordei*, &c. (Hym)
 " *tabacum* (Hym) destroys *Microgaster*.
 {*congregata* (Hym)
Pirates *bequillatus* (Hec) destroys bed bugs (Hom)
Pytho americanus (Col) destroys *Orthogum*
 {*lineatum*. (Col)
Reclivus *personatus* (Hec) destroys bed bugs (Hom)
Rhagonia (Cec) (Col) destroys Lar of Saw
 {flies. (Hym)
Rhizophagus (Cec) (Col) destroys *Psitogaster* (Col)
Rhyssa (Rimpla) *atrata*, & *lunator* (Hym)
 {destroy *Tanner columba*. (Hym)
Rhysa *quadrinaculata* (Cec) (Cec) destroys
 {caterpillars. (Lep)
Sphex (Hym) said to destroy cockroaches
 {Orth)
Spiders destroy *Pirris rapae*, &c. (Lep)
Staphylinidae (Col) destroys other insects;
Sticticus *diana* (Hec) destroys *Epilachna*,
 {*lucalis*, or *Squash lady bug*. (Col)
 " *limbriatus* (Hec) destroys (Lep) &c.
Stenus *grandis*, &c. (Hym) destroys Cicada or
 {Hornet fly. (Hom)
Taphus (Dip) destroys Aphides, or plant lice.
 (Hom)
Tachina (Dip) destroys grass hoppers. (Orth)
 {*calyptrata*, (Lep), *colorata*, *pubes*
 {*hells*, &c. (Cec) &c.
 " *quida* (Dip) destroys *Eacles*.
 {*impensalis*. (Lep)
Telae. (Hym) said to destroy eggs of
 {*Notonecta*. (Hec)
Telphonus (Col) L. said to destroy soft bodied
 insects.
Tetracha, (*Megacphala*) *virginia* & *carolina*.
 {L. destroys other insects.

79x.

Thanasimus (*Pseudoclerus*) (Col) destroy
 { grubs in bark.
 " *nigripes* destroy L of *Hylesinus*.
 { aculeatus (Col)
Theridion & *Hypophyllum* (Spiders) destroy
 young caterpillars of *Pieris*. (Lep)
Thomis (Btk) said to destroy *Aspilota* twice (L)
Tricoma (Horn) destroys bees. (Hym)
Tritolus (Col) destroy wood boring larvae.
Toxophora (Dip) destroys *Eumenes fraterna* (Hym)

Trioxys (Hym) destroys aphides on plant lice.
Trichlepa *Anthrenus* insidiosis. destroy
 { small insects.
Wasps (*vespidae*) (Hym) destroy flies.
 { other insects.
 " { breed. *Meloe* (Col) & *Phigiphores*.
 { (Col) in body
 Water beetles *Lyttidæ*. *Hydrophilus*
 " { &c. destroy other insects, fish
 { & fish eggs.

Other agencies useful in the destruction of Insects.

from Ag. reports.

Amantia muscarius, a fungus poisoning flies.
Amantium muscatorum a plant " "
 Arsenite of copper. Paris insect. used to
 { poison insects.
Antemisia { plant used to fumigate or suffocate
 { bees in China
 Birds, various *Phœniceas* (Ag Rep 1867. 2004)
Batrach. bassiana. fungus. destroying
 { Silk worms.
 Club foot in cabbage a disease.
 Cobalt - used to poison insects
Colchicum *White* *Veratrum album* used to
 { destroy insects.
 Iodine, & starch used to attract snails, &c.
 Gulls destroy *Amelans simplex* n. W. W. W.
Meloe areolaris (China. tree) leaves &
 { berries used to destroy insects.
 { Bats in houses &c.

Paris green. Arsenite of copper used.
 { to poison Boll worm. cotton cat
 { caterpillar. Tobacco fly &c.
Polygonum. - plant used as a wash.
 { for horses to drive off flies. see
 { also Walnut leaves.
 Poke berry, *Phytolacca* used to destroy
 { *Cotyledons* &c.
Pyrethrum plant used to destroy or
 { drive away insects
 Salt used to destroy wire worms.
 { the larvae of *Cateridæ*.
Sphaeria morbosa, a fungoid growth
 { forming black knots on plum trees.
 { & harboring noxious insects.
 Tobacco used as a wash on horses &c.
 - { to drive away flies - }

Amongst the diseases affecting the cotton plant, will be found, Blight,
 Scorch, and Rust.

Amongst the Birds. Gulls. Quail. Sparrows, &c. &c. are mentioned as beneficial.
 Lead is sometimes, boxed into by insects - viz. *Chiron cinctus*. *Hydrophilus*. -
 (*Callidium*) *basilus*. (Col) - *Arctium*, *Apale*, & *Bastus*. (Col) have also been recorded.
 as being eaters of lead. & also probably a *Sorex* (Hym).

J. H. H. Sep. 30. 1877.

List of Vegetable and Animal Substances.

injured, or destroyed.

by Insects.

mentioned in the preceding Index.

The following list consists principally of such substances in connexion with insects as have been mentioned in the reports of the Department of Agriculture, from the year 1854, to the present date, many however have been omitted, when indefinitely named such as, Brambles, Grass, Berbage, & fruit or Forest trees, &c. & others have been inserted from my private note book when deemed of sufficient consequence to the planter. Horticulturalist, or fruit grower. I would however state that this list is necessarily very incomplete as I refer mostly to such food plants &c. as have been mentioned in the index, & by no means includes other vegetable or animal substances mentioned in my larger note books, which probably may be published when the plates are all ready for publication. Some of the common English names of the insect, are also omitted, as varying in different states. The European insects quoted are mentioned merely, to warn our own Farmers & Gardeners that such genera or species of destructive insects are already existing in Europe, & may eventually be introduced into the United States. — amongst the foreign imported seeds, roots, or plants. Take for example the now too common insect, the new White Cabbage butterfly *Pieris rapae* which totally unknown in the United States a few years ago, at present swarms from Maine to Maryland & destroys the hopes of the gardener & "truck farmer" — "Wherever the words "frequented" by "occur in the list, it signifies that the plant referred to is probably injured by the insect named. The following abbreviations are also used "Doe" signifies either the disease or simply the leaf, "inj" means "injured" — The letter L. before the name of an insect, signifies either Larva, grub, or caterpillar. "P" pupa or chrysalis. "Co" Cocoon & "G" imago or perfect insect. "a note of interrogation" implies some doubt, and a single line under a name signifies it should be in italics. It is merely a synonym. It is not the latest name given which is distinguished by two lines = under it. When a small star, or cross, is marked on the margin, before or after a name, it signifies that such name is misstated in the alphabetical list, & should be corrected if the work is ever printed in type. The botanical names of the plants (principally from Gray) have been given for the use of students, or foreigners not acquainted with our common & local English names. The following abbreviations are also used "Col" Coleoptera, or beetles. "Orth" Orthoptera. Grasshoppers crickets &c. "Neu" Neuroptera. Dragon Flies or "Lym" Hymenoptera. Bee wasps &c. "Hem" Hemiptera. Plant bugs &c. "Hom" Homoptera. plant lice or hoppers. "Dipt" Diptera. Flies. "Lep" Lepidoptera. Butterflies moths &c. "Dy" Diptera. Two winged flies. House or meat flies. Mosquitoes &c. Dep Ag. Department of Agriculture. Eu. Europe. U.S. United States. For. Foreign.

Abies. Spruce or Fir.
" balsamea. Balsam Gr.
" canadensis. Hemlock Spruce.

Acer. Maple
" dasycarpum. Sugar maple
" Fruit of Oak.
" injured by *Balaninus natus* &c.
Adiantum. Maidenhair fern.
" eaten by *Samia cecropia* &c.

Alder (Black) *Alnus serrulata*.
" " fol. frequented by *Neostiftera (Cecropia)* *obscura*. (Form)
" " frequented by *Aspilota* *lutea* (Form)
" " " by *Proctos* *mutata* (Form)
" " " *Triclistus* *chalybea* (Col).
" " " *Aspilota* *lutea* (Form)
" " " *Aspilota* *lutea* (Form)
" " " *Aspilota* *lutea* (Form)

- Bass wood, London, *Italy*.
 " fol. & injured by *Lachnus caryae*. (Hom)
 Bats. infested with *Acanthia* *Gomer lactaria*.
 { Bed bugs. (Het)
 Bauhinia, fol. eaten by *Alticus*. Bauhinia.
 { *Leptorhina* (Lep)
 Bean, Java. *Phaeocolas*. &
 " injured fol & *Bruchus fabae*. (Hom)
 " field. fruit. injured by *Bruchus obscurus* R.
 { *Myallus*. *Bruchus* *granarius*
 { var. " " " *varicornis* (Col)
 x Bed bugs. destroyed by *Comptosia* *marginata*.
 { *sanguisuga*. (Het)
 Bee (honey) destroyed by *A. apimarus* *spissus* (Hym)
 " " by a plant. *Aciceras*.
 " " by *Asilus*. (Hym)
 " (Mason) " *Chorus obscurus* (Eu) (Col)
 " (Honey) " *aphidius* " " "
 " comb. wax. honey destroyed by *Gallica cerasa*.
 { Was or bee moth. (Hym)
 " nourish L of *Meloe angusticollis* in body (Col)
 " destroyed by *Phomachis* *bastardi*. (Hym)
 x " " *Proctacanthus*. (Hym)
 " nourish L of *Stylaps* in body. (Col)
 Bies nits supported by *Curculio*.
 { *ornicarius* (Col)
 " by *torrid*. (Col)
 Beech. Fages.
 " " injured by *Agrilus* *viridis*. (Eu) (Col)
 " Sap eaten by *A. albicollis* (Colin's)
 { *nitidus* (Col)
 x " Wood injured by *Agrilus viridis*. (Eu) (Col)
 " " *Biseca* (Stenurus) →
 { *divicatus*. Col
 " frequented by *Enisoma imbricator*. (Hom)
 " " *Blacus* *coquebertii*. (Hom)
 " injured by *Polydorus micans*. Col. (Eu)
 " nits injured by *Proctos* { *Tenebrionidae*
 { *abund* Col
 Beet. Beet.
 " shows & leaves injured by *Silpha atrata*.
 (Eu) (Col) & *laevigata*. (Eu) (Col)
 Pergamot. Monarda.
 " (wild), injured by *Sphinx eximilis*. (Hym)
 Petiole Birch.
 Birch twigs & fol. frequented by *Acanthosoma*.
 { *ignis*. (Het)
 " twigs & fol injured by *Enisoma tessellata*
 { *abund*
 " under bark frequented by
 { *Pyrochroa coccinea* (Eu) (Col) -

- Birch Lab. injured by *Longus juglandis*. (Het)
 Birds (some) infested with bed bugs. -
 { *Acanthia* (Comp) *lactulana*. (Het)
 " infested with Biting bird lice etc.
 { *Mallophaga* (Orth)
 " blood sucked by Fleas, *Pulex irritans*. (Dip)
 " skins injured by *Stinus* *far* Col
 { see Nat. Hist specimens. &
 Biscuit ship injured by *Slodrepa* (Anobium)
 { *parica* (Col) & see Bread &
 " injured by *Tenebrio* *Tenebrionellus*
 { *molitor* & (Col)
 Bittersweet. *Solanum dulcamara*.
 " fol injured by *Lygus*. *Phytocoris*.
 { *cinereus*. (Het)
 Black alder. *Alnus serrulata*.
 " injured by *Caridea subfasciata*. (Hom)
 { *ap. obscurus*
 " injured by *Proctodera chalybea*. Col,
 &? " *Proctos*. *undulata*? (Hom)
 Blackberry. *Rubus villosus*.
 " flower & fruit frequented by *Bythos*.
 { *Eu* (Col)
 " bushes. frequented by *Castropera*.
 { *proctos*. (Hom)
 " bushes frequented by *Chirochne*.
 { *coccinea* *Chirochne* *quadricollis*. (Hom)
 " stalks frequented by *Chirochne*.
 { *mincus*. (Orth)
 " stalks bored by *Chirochne* *undulata*. (Col)
 " Bushes frequented by *Chirochne* (Hom)
 " by *Proctos* *undulata* (Hom)
 Blackberry. *Vaccinium*.
 " frequented by *Chirochne* *proctos*. (Hom)
 Blood of Animals, mankind &c. sucked
 { by *Culex*, *Musquitos*. *Pulex* *fleas*
 { *Acanthia* bed bug. &c. &c.
 Boleti. see also fungi.
 " frequented by *Mallophaga* *vicinaria*. (Col)
 " by *Tenebrionidae*. (Col)
 Blister flies. see *Cantharis*. *Epicauda* &c. (Col)
 Bores in. Man with cave. fly. frequented by
 { *Adelops hirtus*. Col
 " eaten by *Staphylinidae* *Dermestidae* Col
 " see also Carroin
 Books. injured by *Dermestidae*. Col.
 " " *Dermestes lardarius*. Col.
 { *vulpinus* &c. &c.
 " injured by *Ptilinus pectinicornis*.
 { (Col)
 " injured by *Platodes*. *Ecobus*
 { all the *Blattidae* or Cockroaches (Orth)
 { *Blattus* 26 Aug. 7.

Brambles. Rubus.

" frequented by *Empicoris* (Halter) vittata.

" & many other insects too numerous to enumerate here.

Brassica. injured by *L. nemorosus* (Linn.)

" moths. (Col) See *Taraxacum* broad.

Brassica oleracea see Cabbage Cauliflower &c.

Brassica rapa Turnip.

Bread injured by *Ectopha* *Blatta germanica*

" other cockroaches. "Orth."

" injured by *Sitotroga* *Periclyptus*

" *Spicaria*. (Col)

" injured by *Scydmaenus* *Tenebrio* *moths* (Col)

" " " *obscurus* (Col)

" " " *L. Troglodytes* *Tenebrionidae*

" *mauritanica* (Col)

Buckwheat. *Fagopyrum*.

" *Col* injured by *Ponera* *antennata* (Lep)

Buttercup. *Ranunculus*.

" injured by *Epicauta cinerea* (Col)

" *Carthagenensis* (Col)

" *Col* injured by *Meloe angusticollis* (Col)

Butternut. *Juglans cinerea*.

" frequented by *Enchytraeus* *lenticulata* (Horn)

" bark & wood, injured by *Scolytus* -

" *canadensis* *quadricornis* (Col)

" *Col* injured by *Uthys* *juglandis* (Horn)

Cabbage. *Brassica oleracea*.

" roots &c. injured by *L. Anthomyia*.

" *brassicarum* (Lep)

" club foot, a disease formerly thought to be

" caused by *L. Anthomyia brassicae* (Lep)

" *now* injured by *Adonia* *radicis* (Horn)

" *in* *L. Bipunctata* *anticularia* (Lep)

" *leaves* *in* *col* by *Diabrotica* -

" *varicosa* *varicosa* (Col)

" *leaves* *in* *col* by *Diabrotica* -

" *leaves* *in* *col* by *Diabrotica* -

" *leaves* *in* *col* by *Diabrotica* -

" *leaves* *in* *col* by *Diabrotica* -

" *leaves* *in* *col* by *Diabrotica* -

" *leaves* *in* *col* by *Diabrotica* -

" *leaves* *in* *col* by *Diabrotica* -

" *leaves* *in* *col* by *Diabrotica* -

" *leaves* *in* *col* by *Diabrotica* -

" *leaves* *in* *col* by *Diabrotica* -

" *leaves* *in* *col* by *Diabrotica* -

" *leaves* *in* *col* by *Diabrotica* -

" *leaves* *in* *col* by *Diabrotica* -

" *leaves* *in* *col* by *Diabrotica* -

" *leaves* *in* *col* by *Diabrotica* -

" *leaves* *in* *col* by *Diabrotica* -

" *leaves* *in* *col* by *Diabrotica* -

" *leaves* *in* *col* by *Diabrotica* -

" *leaves* *in* *col* by *Diabrotica* -

" *leaves* *in* *col* by *Diabrotica* -

" *leaves* *in* *col* by *Diabrotica* -

Cactus. Food of coccus cacti. (Horn)

" or cochineal insect. (Cactus) *proctos* (Horn)

" *Cantharides*, or Blister flies, eaten by

" *Sitotroga* *periclyptus* (Linn.)

Capsicum. Cayenne or red pepper

" Carcasses, see carrion.

" Carrion, devoured by Carrion beetles.

" *Silpha* *neochorus* (Horn)

" eaten by *Neomobius* *flacheta* *vittatus* (Orth)

" " by *Corynetes* *neochorus* *violaceus* (Col)

" " " *Blomestidae* (Col)

" " " *Cryptophilus* *villosus* (Col)

" " " *Neosticidae* (Col)

" " " *Calliphora* *vomitoria* (Lep)

" " " *Lucilia* *Caesar* (Lep)

" " " *Surcophaga* *carnaria* (Lep)

" " " *Neocrophorus* *marginalis*

" " *Silpha* (Col)

" " *Neocrophorus* *Silpha* *americana* (Col)

" " *Neomobius* *(acheta)* *vittatus* (Orth)

" " *Neocrophorus* *pellata*

" " *(see Peltis americana)* (Col)

" " *nitidulidae* (Col)

" " *Peltis americana* *neocrophorus*

" " *pellata* (Col)

" " *Peltis* *neocrophorus* *surinamensis* (Col)

" " *Silpha* *neocrophorus* *americana*

" " *Silpha* *(neocrophorus)* *velutina* (Col)

" destroyed by *Staphylinidae* (Col)

" " *Stalidota* *geminata* (Col)

" " *Trogidae* (Col)

Camots *Daucus* *carota*.

" *Col* injured by *L. Popilio* *asteros* (Lep)

" injured by *Phytodecta* *epithymum* (Col)

" " *Pilla* *rosae* (Lep)

Castor oil plant. *Ricinus* *communis*.

" " eaten by *Allacus* *virginicus* (Lep)

" " " *Samia* *Allacus* *virginicus*

Castanea *pumila* *Chinquapi*.

Castanea *vesca* *Chesnut*.

Catkins destroyed by *Uromyces*

" *Gryphus* (Lep)

" destroyed by *Stethidae* (Col)

" " " *Calosoma* *calidum*

" " " *Calosoma* *calidum*

Cattle, in Europe, sometimes killed by

" *Simulium* *californicum* (Lep)

" stung by *Stomoxys* *californicus*

Cats infested & tormented by fleas.

" *Pulex irritans* (Col)

" *Pulex irritans* (Col)

" *Pulex irritans* (Col)

" *Pulex irritans* (Col)

" *Pulex irritans* (Col)

" *Pulex irritans* (Col)

" *Pulex irritans* (Col)

" *Pulex irritans* (Col)

Cactus tuna used as a hedge plant in Spain

Cactus cochinealifera, food of the cochineal insect

Commersonia, Large flower.

" injured by *Prodenia commersoniae* (Lep.)
 Collections of insects, &c. injured by *Anthonomus*,
 &c. (Col.)

" injured by *Scymnus*, *maculatus*.
 & almost all the *Formicidae*. (Col.)

Col. of net hut. see also for feathers, &c.
 " dried plants, &c. injured by *Phorus*.
 (Lep.) &c. (Col.)

Cork. injured by *Formica* *maculatus*.
 (Col.)

Corn & maize, see also maize.

" grain injured by *Unacantha* *Selechia*
cecidia (Lep.)

" Sweet, or maize, injured by *Ips* *quadri-*
signatus. see *Polyphagus* *quadrystus*.
 (Col.)

" " " by *Saturnia* *io* *Hyperichia* *orealis*,
 " " " *Lophyrus* *macra* (Lep.)

Cornus, see Dogwood, & *Corylus*, see Filbert, Hazle nuts
 Cotton *Gossypium* *herbaceum*.

" plant, & fol. frequented by ants. (Hym.)
 { *Formica* &c. for the sake of the honey dew
 & *Aculeus* *macra* injured by *Ant* worms. See
 { *Agrotis* *leucis*.

" fol. injured by Cotton army worm.
 { *Heliothis* *armigera*, *Uleia* *arctifera*,
 { *Anthonomus* *exilis* (Lep.)

" fr. injured by *A. urens*? (Lep.)
 " " " *Phaenocarpa* *textilis* (Lep.)

" plants injured by *A. urens*, *cray*, *fish*.
 " fol. injured by *Spanworm*, *prob.* *Boemia* (Lep.)

" " " *Calocera* *variegata*. (Lep.)
 " Bolls frequented by *Carpophilus* *hemipennis* (Lep.)

" " when decayed frequented by *Centistes*
periclitus. (Lep.)

" flowers. frequented by *Centistes* *periclitus*
 { *Centistes* *periclitus*, *Centistes* *periclitus*, *Centistes* *periclitus*,
 { on the pollen. (Col.)

" Bolls when injured frequented by *Centistes*
periclitus. (Col.) feed probably on minute fungi.

" fol & flowers injured by *Dialia* *noctua* *deca-*
decim-punctata. (Col.)

" flow stained by *Dysdercus* *cuticularis*.
 { *Phaenocarpa* *textilis*. (or "the cotton cleaner" (Hym.)

" fls. & fr. injured by *Spizella* *trigyna* *Col.*
 " fr. injured by *Span* worms, *prob.* *Boemia* (Lep.)

" Bolls when injured frequented by *Centistes*
periclitus. (Col.)

" *Cottonia* *indica* (Lep.) *prob.* for flowering &c.
 " Bolls when injured frequented by *Centistes* *periclitus*

" *Euphorbia* *melancholica* (Lep.) *prob.* for sap.

Cotton fields, frequented by *Eurhynchus* *claudus*:

" { *Argemone* *columbina* (Lep.) feeds on
 white passion flower.

" { fol. injured by grasshoppers *Calopterus*
 { &c. (Col.)

" Bolls injured by *Centistes* *periclitus*
 { *Centistes* *periclitus* (Lep.)

" { fol. injured by *Centistes* *periclitus*, *Centistes* *periclitus*,
 { *Centistes* *periclitus* (Lep.)

" { fol. injured by *Centistes* *periclitus*, *Centistes* *periclitus*,
 { (p. 103, pl. 4, fig. 6. (Lep.)

" fol. injured by *Lophyrus* *macra* (Lep.)
 frequented by *Parus* *saccharalis*. (Hym.)

" injured by *Centistes* *periclitus*. (Lep.)
 { fig. 6. (Lep.)

" flowers frequented by *Centistes* *periclitus*.
 { &c. (Col.)

" stalks injured by punctures of *Orchelmus*
 { (Lep.)

" fol. injured by *Centistes* *periclitus*, *Centistes* *periclitus*,
 { *Centistes* *periclitus* (Lep.)

" Bolls injured by *Centistes* *periclitus*, *Centistes* *periclitus*,
 { *Centistes* *periclitus* (Lep.)

" flowers & decaying bolls frequented by
 { *Centistes* *periclitus*, *Centistes* *periclitus*, *Centistes* *periclitus*,
 { fol. injured by *Centistes* *periclitus*, *Centistes* *periclitus*,
 { *Centistes* *periclitus* (Lep.)

" flowers when injured frequented by *Centistes* *periclitus*,
 { *Centistes* *periclitus* (Lep.)

" fol. injured by *Centistes* *periclitus*, *Centistes* *periclitus*,
 { *Centistes* *periclitus* (Lep.)

" fol. injured by *Centistes* *periclitus*, *Centistes* *periclitus*,
 { *Centistes* *periclitus* (Lep.)

" flower frequented by *Centistes* *periclitus*,
 { probably for nectar. (Lep.)

Cotton articles, in Reports, for reference

" Remarks on the cultivation, 1869, p. 30.

" The Cotton trade, 1852, p. 657.

" Remarks on the Cotton, of India
 { 1853, 1854, 1855, 1856, 1857, 1858, 1859, 1860, 1861, 1862, 1863, 1864, 1865, 1866, 1867, 1868, 1869, 1870, 1871, 1872, 1873, 1874, 1875, 1876, 1877, 1878, 1879, 1880, 1881, 1882, 1883, 1884, 1885, 1886, 1887, 1888, 1889, 1890, 1891, 1892, 1893, 1894, 1895, 1896, 1897, 1898, 1899, 1900, 1901, 1902, 1903, 1904, 1905, 1906, 1907, 1908, 1909, 1910, 1911, 1912, 1913, 1914, 1915, 1916, 1917, 1918, 1919, 1920, 1921, 1922, 1923, 1924, 1925, 1926, 1927, 1928, 1929, 1930, 1931, 1932, 1933, 1934, 1935, 1936, 1937, 1938, 1939, 1940, 1941, 1942, 1943, 1944, 1945, 1946, 1947, 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 2679, 2680, 2681, 2682, 2683, 2684, 2685, 2686, 2687, 2688, 2689, 2690, 2691, 2692, 2693, 2694, 2695, 2696, 2697, 2698, 2699, 2700, 2701, 2702, 2703, 2704, 2705, 2706, 2707, 2708, 2709, 2710, 2711, 2712, 2713, 2714, 2715, 2716, 2717, 2718, 2719, 2720, 2721, 2722, 2723, 2724, 2725, 2726, 2727, 2728, 2729, 2730, 2731, 2732, 2733, 2734, 2735, 2736, 2737, 2738, 2739, 2740, 2741, 2742, 2743, 2744, 2745, 2746, 2747, 2748, 2749, 2750, 2751, 2752, 2753, 2754, 2755, 2756, 2757, 2758, 2759, 2760, 2761, 2762, 2763, 2764, 2765, 2766, 2767, 2768, 2769, 2770, 2771, 2772, 2773, 2774, 2775, 2776, 2777, 2778, 2779, 2780, 2781, 2782, 2783, 2784, 2785, 2786, 2787, 2788, 2789, 2790, 2791, 2792, 2793, 2794, 2795, 2796, 2797, 2798, 2799, 2800, 2801, 2802, 2803, 2804, 2805, 2806, 2807, 2808, 2809, 2810, 2811, 2812, 2813, 2814, 2815, 2816, 2817, 2818, 2819, 2820, 2821, 2822, 2823, 2824, 2825, 2826, 2827, 2828, 2829, 2830, 2831, 2832, 2833, 2834, 2835, 2836, 2837, 2838, 2839, 2840, 2841, 2842, 2843, 2844, 2845, 2846, 2847, 2848, 2849, 2850, 2851, 2852, 2853, 2854, 2855, 2856, 2857, 2858, 2859, 2860, 2861, 2862, 2863, 2864, 2865, 2866, 2867, 2868, 2869, 2870, 2871, 2872, 2873, 2874, 2875, 2876, 2877, 2878, 2879, 2880, 2881, 2882, 2883, 2884, 2885, 2886, 2887, 2888, 2889, 2890, 2891, 2892, 2893, 2894, 2895, 2896, 2897, 2898, 2899, 2900, 2901, 2902, 2903, 2904, 2905, 2906, 2907, 2908, 2909, 2910, 2911, 2912, 2913, 2914, 2915, 2916, 2917, 2918, 2919, 2920, 2921, 2922, 2923, 2924, 2925, 2926, 2927, 2928, 2929, 2930, 2931, 2932, 2933, 2934, 2935, 2936, 2937, 2938, 2939, 2940, 2941, 2942, 2943, 2944, 2945, 2946, 2947, 2948, 2949, 2950, 2951, 2952, 2953, 2954, 2955, 2956, 2957, 2958, 2959, 2960, 2961, 2962, 2963, 2964, 2965, 2966, 2967, 2968, 2969, 2970, 2971, 2972, 2973, 2974, 2975, 2976, 2977, 2978, 2979, 2980, 2981, 2982, 2983, 2984, 2985, 2986, 2987, 2988, 2989, 2990, 2991, 2992, 2993, 2994, 2995, 2996, 2997, 2998, 2999, 3000, 3001, 3002, 3003, 3004, 3005, 3006, 3007, 3008, 3009, 3010, 3011, 3012, 3013, 3014, 3015, 3016, 3017, 3018, 3019, 3020, 3021, 3022, 3023, 3024, 3025, 3026, 3027, 3028, 3029, 3030, 3031, 3032, 3033, 3034, 3035, 3036, 3037, 3038, 3039, 3040, 3041, 3042, 3043, 3044, 3045, 3046, 3047, 3048, 3049, 3050, 3051, 3052, 3053, 3054, 3055, 3056, 3057, 3058, 3059, 3060, 3061, 3062, 3063, 3064, 3065, 3066, 3067, 3068, 3069, 3070, 3071, 3072, 3073, 3074, 3075, 3076, 3077, 3078, 3079, 3080, 3081, 3082, 3083, 3084, 3085, 3086, 3087, 3088, 3089, 3090, 3091, 3092, 3093, 3094, 3095, 3096, 3097, 3098, 3099, 3100, 3101, 3102, 3103, 3104, 3105, 3106, 3107, 3108, 3109, 3110, 3111, 3112, 3113, 3114, 3115, 3116, 3117, 3118, 3119, 3120, 3121, 3122, 3123, 3124, 3125, 3126, 3127, 3128, 3129, 3130, 3131, 3132, 3133, 3134, 3135, 3136, 3137, 3138, 3139, 3140, 3141, 3142, 3143, 3144, 3145, 3146, 3147, 3148, 3149, 3150, 3151, 3152, 3153, 3154, 3155, 3156, 3157, 3158, 3159, 3160, 3161, 3162, 3163, 3164, 3165, 3166, 3167, 3168, 3169, 3170, 3171, 3172, 3173, 3174, 3175, 3176, 3177, 3178, 3179, 3180, 3181, 3182, 3183, 3184, 3185, 3186, 3187, 3188, 3189, 3190, 3191, 3192, 3193, 3194, 3195, 3196, 3197, 3198, 3199, 3200, 3201, 3202, 3203, 3204, 3205, 3206, 3207, 3208, 3209, 3210, 3211, 3212, 3213, 3214, 3215, 3216, 3217, 3218, 3219, 3220, 3221, 3222, 3223, 3224, 3225, 3226, 3227, 3228, 3229, 3230, 3231, 3232, 3233, 3234, 3235, 3236, 3237, 3238, 3239, 3240, 3241, 3242, 3243, 3244, 3245, 3246, 3247, 3248, 3249, 3250, 3251, 3252, 3253, 3254, 3255, 3256, 3257, 3258, 3259, 3260, 3261, 3262, 3263, 3264, 3265, 3266, 3267, 3268, 3269, 3270, 3271, 3272, 3

Dogs. blood sucked by *Tulex imitans*. (Wp.)
See.

Logwood Cornus.

fol. eaten by *Saturnia* *io*. *Hypochirsis*
vane (Col.)

Diospyros virginiana so Persimmon

Early worm. eaten by *Prodenia pyraus*.
Elipolampes (lightening bug) (Col.)

Egg plant. *Solanum*. *macranthum*.

fol. injured by *Longipora longisoma*
Luc. juncea (Col.) & *decimnata*.
 (Col.)

fol. injured by *Epicaula anerea*. 8. 6. 6.
Elm. *Sambucus*. *canadensis*.

glass bowl etc. by *Desmoceris*.

palialis. *cyaneus*. Col.
 flowers frequented by *Macrodactylus*.
subspinosus. (Col.)

Elm. foliage injured by *Unispheryx*.

Ulmus. *vernatus*. (Col.)

Elm. fol. injured by *Ceratomyia amplexor*.

guineensis or *Elm* *Sphinx*. (Lep.)

fol. injured by *Catacha lanigera*

Arceuthobium. Col.

fol. destroyed by *Ennomos subsignaria*.

(Lep.) head took measuring worm.

fol. destroyed by *Palaeocla californensis*.

Taeniocla xanthomelaena. (Col.)

fol. injured by *Gaeopodes chalybea*

Halictia. (Col.)

fol. injured by *Halictia crenulata*.

Phyllophaga. Col.

fol. injured by *Gypthantia Coctis*

Enlora. (Lep.)

fol. injured by *Polyphylla variolosa*.

Macronoxia. (Col.)

fluorescent sap. fed upon by *Larone*

of *Mycelobia*. (Lep.)

fol. injured by *Lachnosterna*

Phyllophaga fusca. *hirsuta*. *micans*.

9. (Col.)

Twigs gnawed by *Oncideres*

cingulatus. or Twig gnawer. (Col.)

se injured by *Phyllophaga fusca*.

" " *Phyllophaga fusca*.

" " *Phyllophaga fusca*.

" " *Phyllophaga fusca*.

" " *Phyllophaga fusca*.

" " *Phyllophaga fusca*.

" " *Phyllophaga fusca*.

" " *Phyllophaga fusca*.

" " *Phyllophaga fusca*.

" " *Phyllophaga fusca*.

" " *Phyllophaga fusca*.

" " *Phyllophaga fusca*.

" " *Phyllophaga fusca*.

" " *Phyllophaga fusca*.

Eupatorium frequented by *Archaea galata*
Smilia auriculata (Hon)

Excrement of herbaceous animals see also
manure. dung. &c

" frequented. 11 form food of *Ateuchus*
Egyptiorum. or sacred beetle of the

Egyptians. (Col.)

" fed upon by *Aphodius*. (Col.)

" frequented by *Centron* leaves. (Col.)

" " by *Copris*. *carolinia*. Col.

" " *Scaphisoma* *sp.* *Scaphisoma*. Col.

" " *Scaphisoma*. (Col.)

" " *Scaphisoma*. (Col.)

" " *Scaphisoma*. (Col.)

" " *Scaphisoma*. (Col.)

" " *Scaphisoma*. (Col.)

" " *Scaphisoma*. (Col.)

" " *Scaphisoma*. (Col.)

" " *Scaphisoma*. (Col.)

" " *Scaphisoma*. (Col.)

" " *Scaphisoma*. (Col.)

" " *Scaphisoma*. (Col.)

" " *Scaphisoma*. (Col.)

" " *Scaphisoma*. (Col.)

" " *Scaphisoma*. (Col.)

" " *Scaphisoma*. (Col.)

" " *Scaphisoma*. (Col.)

" " *Scaphisoma*. (Col.)

" " *Scaphisoma*. (Col.)

" " *Scaphisoma*. (Col.)

" " *Scaphisoma*. (Col.)

" " *Scaphisoma*. (Col.)

" " *Scaphisoma*. (Col.)

" " *Scaphisoma*. (Col.)

Gooseberry. fol. injured by *Pematus*.

{ *ventricosus*, "imported Curran worm" Eng.

" { frequented by *Tachylophora cornuta*.

{ *munosa*. (Hom)

" { injured by *Polydorus flavipes* (Eu.)

{ *Europe*

" { it injured by *Distiphora paucicornis*

{ native Saw fly (Hom)

x *Glycyrrhiza glabra* s. *leionora*

x *Gossypium herbaceum*. Cotton

Grafts injured by *Polydorus sericeus* (Eu.)

Trunk in general. *Wheat*. Eng. *Bentley* &c.

" roots &c. injured by *Agrotis sepium* (Eu.)

{ *flor* } it mainly other cut worms (Eng.)

{ root to be injured by *Amure* &c.

{ (Eu.) (Col.)

" { injured by *Blacus macropus*

{ *leucoplerus*. (Holt) (Chenck. Eng.)

" { injured by *Calandra* (*Sitophilus*

{ *granarius*) & *metopostatus*. (Col.)

" { injured by *Calandra oxyrac*.

{ (*Sitophilus*) (Col.)

" { injured in Europe, by some *Cerab*.

{ *lae*. (Holt)

" { *Oryza* Barley. Wheat &c. injured by

{ *Chenopis*. (Eng.)

" { injured by *Cicynus testaceus*. (Col.)

" { " *Chenopis* *Academy*

{ native "Wheat, midge" (Eng.)

" { when young injured by *Chenopis*

{ *lae*. (Holt)

" { injured by *Chenopis* *lae*

{ *lae*. (Holt) *Chenopis* *lae*

" { *Chenopis* injured by *Chenopis*. (Col.)

" { *Chenopis* *lae* injured by *Chenopis*

{ *lae*. (Holt) *Chenopis* *lae*

" { *Chenopis* *lae* injured by *Chenopis*

{ *lae*. (Holt) *Chenopis* *lae*

" { injured by *Chenopis* (Eng.)

" { in Eu. by some *Chenopis* (Col.)

" { said to be injured by *Chenopis* (Col.)

" { Giant injured by *Prodenia* *lae*

{ *lae*. (Holt) *Chenopis* *lae*

" { injured by *Chenopis* *lae*

{ *lae*. (Holt) *Chenopis* *lae*

" { injured by *Chenopis* *lae*

{ *lae*. (Holt) *Chenopis* *lae*

" { injured by *Chenopis* *lae*

{ *lae*. (Holt) *Chenopis* *lae*

" { injured by *Chenopis* *lae*

{ *lae*. (Holt) *Chenopis* *lae*

" { grain moth, or leaf. Eng.

Grain. Roots injured by *Diapla olivacea*.

{ *Eu* crane fly. (Eng.)

{ injured by *Troposita caraboides*.

{ *lae*. (Holt) *Chenopis* *lae*

" { injured by *Chenopis* *lae*

{ *lae*. (Holt) *Chenopis* *lae*

" { injured by *Chenopis* *lae*

{ *lae*. (Holt) *Chenopis* *lae*

" { *Chenopis* shoots &c. said to be injured

{ by *Chenopis* *lae* (Col.) (Eu)

{ *lae*. (Holt) *Chenopis* *lae*

" { *Chenopis* *lae* injured by *Chenopis* *lae*

{ *lae*. (Holt) *Chenopis* *lae*

" { root stem wood, &c. injured, by

{ *Chenopis* *lae* (Col.) *Chenopis* *lae*

{ *lae*. (Holt) *Chenopis* *lae*

" { fol. injured by *Chenopis* *lae*

{ *lae*. (Holt) *Chenopis* *lae*

" { found in large by *Chenopis* *lae*

{ *lae*. (Holt) *Chenopis* *lae*

" { fol. injured by *Chenopis* *lae*

{ *lae*. (Holt) *Chenopis* *lae*

" { *Chenopis* shoots injured by *Chenopis* *lae*

{ *lae*. (Holt) *Chenopis* *lae*

" { *Chenopis* *lae* injured by *Chenopis* *lae*

{ *lae*. (Holt) *Chenopis* *lae*

" { *Chenopis* *lae* injured by *Chenopis* *lae*

{ *lae*. (Holt) *Chenopis* *lae*

" { *Chenopis* *lae* injured by *Chenopis* *lae*

{ *lae*. (Holt) *Chenopis* *lae*

" { *Chenopis* *lae* injured by *Chenopis* *lae*

{ *lae*. (Holt) *Chenopis* *lae*

" { *Chenopis* *lae* injured by *Chenopis* *lae*

{ *lae*. (Holt) *Chenopis* *lae*

" { *Chenopis* *lae* injured by *Chenopis* *lae*

{ *lae*. (Holt) *Chenopis* *lae*

" { *Chenopis* *lae* injured by *Chenopis* *lae*

{ *lae*. (Holt) *Chenopis* *lae*

" { *Chenopis* *lae* injured by *Chenopis* *lae*

{ *lae*. (Holt) *Chenopis* *lae*

" { *Chenopis* *lae* injured by *Chenopis* *lae*

{ *lae*. (Holt) *Chenopis* *lae*

" { *Chenopis* *lae* injured by *Chenopis* *lae*

{ *lae*. (Holt) *Chenopis* *lae*

" { *Chenopis* *lae* injured by *Chenopis* *lae*

{ *lae*. (Holt) *Chenopis* *lae*

" { *Chenopis* *lae* injured by *Chenopis* *lae*

{ *lae*. (Holt) *Chenopis* *lae*

" { *Chenopis* *lae* injured by *Chenopis* *lae*

{ *lae*. (Holt) *Chenopis* *lae*

- Grape, fol & injured by *Nerana helonis*
Rhagothrips pennsylvanicus Hal.
 " injured by *Phylloxera raphanus* Hal.
 " (branches, punctured by) *Acanthos*
rescens Cuth.
 " { frequented by *Oleiscus cognatus* (Hom)
 " fruit bunches & fol. injured by *Bladota*
punctata (Col)
 " fol. injured by Grape leaf gall louse.
Pemphigus (Dactulophaga) vitifolia Hom
 " seed & fruit injured by *Pentonia rita*
virana Loebner botanica (Lep.)
 " (Roots injured) by *Phylloxera*
vastatrix (Hom) (ultra) prob somewhat
 " (wood & roots, injured by *Diurus*
imbricatus (Col), & *P. laticollis* (Col)
 " frequented by *Proconia undata* (Hom)
 " fol. injured & rolled up by *Rhynch*
elis (Col)
 " fol. injured by Grape Saw Fly
Cladonia rita (Hom)
 " injured fruit, frequented by *Stelidota*
geminata (Col)
 " frequented by *Stictopleris Smilia*
inermis (Hom)
 " (when unhealthily frequented by *Syrph*
ylon. serotatum (Col) (Europe)
 " frequented by *Delamora ampelopsidis*
 (Hom)
 " injured by *Emphythorura* *Setigera*
 erroneously called *Stictis* (Hom)
 " (branches injured by *Xylopertha*
sinuata Col. (Eu)
 x Ground Cherry, *Physalis viscosa*.
 " fol. injured by *Chrysomela* 10 lineata.
Monophora (Col)
 Graminae. Grasses
 " shoot, injured by *Agriotes vlesus* &
Amomus 10 lineata & *truncatus* (Col)
 " frequented by *Amphis cepa* (Stata)
lineata (Hom)
 " eaten by *Amabrus* (L.P.P.) *simplex* (Orth)
 " (prob seed injured by *Unicampis*
Bitalis *Alutia*) *Cerculella* *Unguicoma*
muta (Lep)
 " Swamp) frequented by *Oxychis* (Col)
 " injured by *Culepterus femur rubrum*.
 " *Epreus* 10. & all grasshoppers. (Cuth)
 " seed injured by *Dithosis* *Academy*
trilice (local mds. (Lep)
 " destroyed by *Gayitolalpa borealis*.
 " & all mds. crabs & (Orth)

- Grass, seeds & roots, injured by *Homalidae* (Col)
 " roots, fed upon by *Holothrichia crenulata*
 " " " by *Phyllophaga fusca* (L)
 " & all the many beetles. (Col) *La-chinostera*
 " fol. injured by *Lophyrus*.
macra (Ornithogon) (Lep)
 " inj. by *Lucania* *unipunctata* *viridula*.
 (Lep)
 " injured by *Macrodactylus subsericeus*.
 " " *Blissus* *Microtus leucosternus*.
 (Lep)
 " eaten by *Phylloxera* *virgata* (Cuth)
 " frequented by *Pocloptera* (Ornith)
minima (Lata. Eyn) (Hom)
 " injured by *Prodenia autumnalis*
 " Roots injured by *L. Tigula obscura* (Lep)
 " injured by *Xyphidum fasciatum*.
Orchelmum gracile (Cuth)
 Gum sweet. Liquid amber. *Styraciflua*.
 " for eaten by *Eucalyptus* *imbricatus* (Lep)
 " (roofs, wood prob injured by
Dytiscus *Selyus* (Col)
 Hair of many animals & eaten by
Mallophaga or biting kind see
 Hay. said to be injured by *Urophora*
quadrangularis (Hom)
 Huckle. *Corylus*. — Hawthorn *Crataegus*
 " fruit injured by *L. Balanus rectus* &
nasalis 10. Nat. univ. (Col)
 " wood injured by *Phytus* *pesten*
inermis (Col)
 " fol. injured by *Lichomyza* *sac*
ulitata (Col) &
 " fol. injured by *Trachys minutus* (Col)
 " inj. by *Polytrichum* *micans* (Eu) (Col)
 Homlock. *Abies canadensis*.
 " { leading shoot & injured by *Pissodes*
 " (Stata) (Col)
 " fol. injured by *Phyllophaga*.
lunemora *armis*. *Boletus coniferum*
 (Lep)
 Hemph. *sidal* see *sidal*.
 Hemph. *Cannabis sativa*.
 " injured by *Laemophanus modestus*
 (Col)
 Hemph. injured by *Hom* see. —
 Hemph. *plants* injured by *Agriotes*.
manchus (Col) *U. obscurus* injure
 roots (Col)
 " roots injured by *Agriotes* *segetis*.
 & *truncatus* (Col) (Lep) 1877 Aug 4.

Hickory. *Carya alba* &c.

- " {Injured case by *Amblicerus*
- " {*Acadellus* *Bostrychus* " "
- " {Wood bored into by *Union cinereus*
- " {*C. garganicum*. *Bostrychus borealis*
- " {Fol. inj. by *Bostrychus aspericollis*
- " {Ate (Col)
- " {Fol. inj. by *Catalpa. lanigera*.
- " {*Aroclia* (Col)
- " {Fol. inj. by *Lachnus caryae*. (Hom)
- " {Wood inj. by *Pieris dimorpha*
- " {*Stenurus* (Col)
- " {Wood inj. by *Dysphaga tenuipes*
- " {Col.
- " {Twigs cut off by *Elaphidion*
- " {villosum. *Sinocrus putator*. or
- " {Col. minor. (Col)
- " {Fol. inj. by *Nuxia. hirsuta*.
- " {*Phagugaster pensylvanicus* (Hom)
- " {Frequentated by *Oliocerus amyotti*.
- " {Hom)
- " {Twigs inj. by *Cnidoceros cingulatus*.
- " {Col.
- " {Bark & wood injured by *Scolytus*
- " {quadrispinosus. *Caryoc*. (Col)
- " {Fol. frequentated by *Smilax rana* (Hom)
- " {Wood injured by *Synoxylon*
- " {Apt. *Scutellaria* (Col)

X Hawthorn. *Crataegus oxycantha*.

Hoof. of Animals when in storage

- {injured by *Domestes lardarius*,
- {H. (Col)

Honey comb. ? injured by *Galleria*

- {*Curculio*. (Lar.)
- " {Fol. inj. by *Aphis*. (Hom)
- " {*Curculio*. (Col). *Dysphaga* &c

Leaves. *Formica*, injured by *Aphides* (Hom)

Loose tree. (Ptelea) fol. frequentated by

- {*Encheirone bidentata*. (Hom)

Hordeum *Barb.*

Horns - on storage) injured by

- {*Domestes lardarius*. &c (Col)

Horses {annoyed & blood sucked by

- " {ear fly of the west *Chrysops*
- " {villatus. *Stomoxys calcitrans*
- " {*Tabanus atratus*. &c (G. (Dip))

" {tormented by *Hippobosc.*

- " {equina. (Lar)

" {injured by stomach bots.

- " {*Psila*. *Stiles equina* (Dip)
- " {*Camp.* injured by *Simulium*
- " {*calamagrostis*. (Lar)

Horse. melle. *Solanum carolinense*.

- " {Injured case by *Chrysomela*.
- " {*Doryphora*. 10 lineata. & *Chrysom*
- " {*ela*. *Doryphora junata*. (Col)

Huckleberry. see whortleberry.

- " {Fol. inj. by *Coccus ilicis* (Hom)
- " {Indigo wild (*Baptisia tinctoria*) fol
- " {upon by *Macro dactylus subspino*.
- " {sus. (Col)

Insects in museums. destroyed by *Anthre*

- " {mus. *Domestes*. &c. &c.

Jamestown weed. (*Datura*) eaten by.

- " {*Chrysomela Doryphora* 10 lineata.
- " {G. (Col)

Tennessee, or Sugar hemlock (abroad) injured

- " {by *Maax*. *Cochol*. & *Mac*. &c. &c.

Jujube. (*Forcign*) fol. eaten by *Bombyx*

- " {mylitta. (Lar)

Juniperus. *virginianus*. Ed. cedar.

Knot weed. see *Polygonum*.

Larch (*Larix*) fol. injured by *Thyridopteryx*

- " {*sephmeriaformis*. *Articus con*.
- " {*ferum* (Lar)

Larch inj. by *Forcign* *larvus*. or

- " {Larch theater. (Lar)

Larix *americanus*. *Tamarack*. Am. or

- " {black Larch.

Lead. bored into & injured by *Union cinereus*.

- " {Col)

" bored into & injured by *L. Phylotruces*

- " {*varulus*. (Col)

Leather. injured by *Ectobia* (Blatt.) *For*

- " {*manica*. & other scabercarkes.
- " {*cructus* &c (Orth)

Lemon. *Citrus limonum*.

- " {Fol. limbs. &c injured by *Aspidictus*
- " {*citricola*. *A. Gloverii*. &c. (Hom)

" injured by *Legumin* (*Coccus*)

- " {*hesperidium*. (Hom)

Lettuce. *Lactuca* leaves injured by *Pyraus*

- " {*fraxianus*. (Pod)

Lilac (*Syringa vulgaris*) fol. & injured by

- " {*Epidoles conchepathus*. (Lar)
- " {*Caude*. (Hom)

" fol. eaten by *Callosamus promethes*

- " {Lar)

" fol. eaten by *Cantharus vesicatoria*

- " {*European* *Blister* fly (Col)

Livistonium vulgare. *Junus*. or *prim*

- " {*Leucanthemum vulgare*. (Ox eye daisy. . . X

Linden or Basswood. (Lar)

- " {Wood injured by *Saperda vestita*.
- " {Col)

Manure. Food of *Scutigeres stercorarius*.
 { *Cornu carolinensis* & *Urochordus* &c.
 & all the so called dung beetles

Maple. (acer) sap eaten by *Alchorhina*.
 nitida. (Coloni) (Col)

Maple. (silver) fol. injured by *L. Anisota*.
 { *(Bygonia)* *reticulata*. (Lep.)

Maple. wood, injured by *Chrysobothris* (Col).
 { *gambelii* bark, frequented by
Dendroctonus canadensis. (Col)

" buds & twigs, injured by *Thy.*
canadensis. (Col)

" branches & twigs frequented by
 Maple scale, *Aspidiotus aceris*.
 Hom.

" injured by *Macronoxia vari-*
cosa. (Col) *Polyphilla*

" fol. injured by *Phyllophaga*.
Lucida & other May beetles. (Col)

" fol. injured by *Thyridothrips*
erichonaeformis. (Holtz) (Lep.)

" Wood, injured by *Platylabus*.
pectenicornis. (Col)

May apple. *Podophyllum peltatum*.
 May pop. *Populus*

" fol. inj. by *L. Agraulis vanillae* &c.
Eristalis claudens &c.

Maize. injured by *Plutus*. (Col).
 " " *Thenebrionellus mobilis*.
 " *T. obscurus*, & most of the *Tenebrion*'s

Meat, injured by *Calliphora vomitoria*.
 { *Lucilia caesar*, *Sarcophaga*, &
 most of the blow flies. (Lep.)

" when dried injured by long
netes violaceus *Dermestes*
Carduinus &c. (Col)

Melon (*Cucurbitis melo* fol. &c. injured.
 by *Diabrotica vittata*. (Col)

" injured by *Phaenocarpa nitida*.
 Col.

" fol. & fruit injured by *Promelia*.
microptera. (Col)

Mentha. mint. — *M. viridis* spec. ment.
 Mugwort. (*Artemisia*) fol. &c. injured by
Phorus rufus (Lep.)

Milk, or Silk Weed. *Asclepias*.
 " fol. eaten by *Euchetes* egl. (Lep.)
 " flower frequented by *Chrysobothris*.
Eumolpus auratus. (Col)

Mint — Mentha
 " fol. injured by *Lygus linealis* (Holtz)

Monarda Bergamot.
 Mountain ash *Pyrus*. *Sorbus americanus*.
Morus mulicantis &c. Mulberry.
 Muller. (verbascum) frequented by *Eus* =
chistus punctipes. (Holtz) (*Pentatom*)
 Mulberry. fol. eaten by *Bombyx*, *Scoriscus*.
 { *mori*, or the silk worm. (Lep.)
 " Wood injured by *Dorcasema*
Wildii. (Col)

Mules. injured by stomach bot. *Paster-*
ophilus equi, & other insects injuring
 horses. (Lep.)

Museums, nat. hist. injured by *Dermestes*
anthrenus, &c. &c. (Lep.)

Mustard (*Sinapis*) injured by *Pyris*
varianus. (Holtz)

" fol. injured by *Murgantia*.
(Strobilus) &c. (Holtz)

" fol. injured by *Pieris olivacea* (Lep.)
 " " " " *rapae*. "
 " " " " " *protidice* "

Nasturtium. *Tropaeolum*.
 " fol. &c. injured by *Pieris rapae* (Lep.)

Nat. hist. sp. injured by *Dermestes*. *Anthrenus*
 { *Plinus*, *Siladropa*, &c. (Col)

Nectarine. *Prunella vulgaris* (var. laevis)
 { fruit injured by *Crematichus*
nanus, & insects injuring the
 peach. (Col)

" fruit & bark injured by *Leg-*
mis exilis, & other insects
 injuring the peach. (Lep.)

Negundo. { fol. inj. by *Thysanoptera* sp. m.
crassipes (Lep.)

Nicotiana, tabacum. *Tabacco*.
 Nuts. See *Harle*, *Filbert* &c.
 " fruit injured by *Balaninus*
nasicus, &c. (Col)

Oak *Quercus*.
 " fol. inj. by *L. Anisota* *Senatoria* (Lep.)
 " " *L. Agnitus* (Europe) (Col)

" Wood, injured by *Alaus myops*, &
A. subulatus (sharp winged bug). (Col)

" fol. inj. by *Amphiraca* (Bombyx).
perthys. (Lep.) (Foreign)

" fol. eaten by *Antheraea Yama mai*
 { *Tortrix* (Col)

" fol. eaten by *Callisotoma prometha*.
 (Lep.)

" frequented by *Comptosia*
viridicincta. (Holtz)

Orange, *fol. inv.* by *Psyche confederata* (Lep.)
 " " " *Rhomalea microplitera* (Orth.)

Oryza sativa, rice

" Orange insects, see 1863 p. 115.

Orange Osage, or Bois d'arc, *Maclura aurantiaca*.

Osage orange, fed upon by *Bombyx. Sericaria*

" *larva mori* (Lep.)

" " infested by *Stenomum acericoles* (Lep.)
reici. necticola (Hom)

" " wood & roots, injured by *Diros*
laticollis, *D. imbricornis*. (Col.)

Oxeye daisy, *Leucanthemum vulgare*.

" flowers permeated by *Macrodactylus*, *subfusus*. (Col.)

Palm trees, injured by a larva (*exigua* grise) (Orth.)

" frequented by *Calceidra picta* (Lep.)

Palm-trees, (Dabal palm-trees) injured by *L. & Cerylonus*, *anthracinus*. (Col.)

" *colod. cator* by *Rhyssophora*, *cruciolata* *Zimmermanni*. (Col.)

Paper, injured by *Ecsthesia* (Blatt.) germ *panica*, *Orth. rostrata*. (Orth.)

Parsley, *Apium petroselinum*.

" *fol. injured* by *Papilio asterias* (Lep.)

Parsnip, *Seed destroyed* by *L. Depressaria ontariella*. (Lep.)

Parsnip, *Pastinaca sativa*.

" *fol. inv.* by *L. Papilio asterias* (Lep.)

" " *AP. Pygma lineolus* (Hom)

Pasture, *See May 1863*, *Pasture* *incur*

" *incur* by *L. Agraxis venellus* (Lep.)

" " *Euplecta claudia* "

Pea, " *Psidium*.

" *Seed inv.* by *Mylabris brachius*.

" *granarius*. (Col.)

" *seed inv.* by *Mylabris fide* (Col.)

" *seeds inv.* by *Helictes armigera* (Lep.)

Peach, *Tonca vulgaris*.

" *ghost. fol. injured* by *Orth. persica* (Lep.)

" *root & young wood inv.* by *L. Agria*

exilis or *Peach* *borer* (Lep.)

" *seed & twig killed* by *Emmura*

prunella (Lep.)

" *in striped*, *fruit & wood* *incur* by *Conese bulbalis*, *D. (Hom)*

" " " *diceros*, "

Peach, *fruit inv.* by *Conotrachelus nemor*

phar, or *Pam* *weevil*, *Carculi*, (Col.)

" *Wood inv.* by *Chrysobothris*

emorata. (Col.)

" *Wood, injured* by *Dicerca divinator* (Col.)

" *twigs cut off* by *Chalcidion vil*

losum. (*Stenomus patator*) (Col.)

" *grape, injured* by *Eurygaster indica* (Col.)

" *grape, injured* by *Eurygaster indica* (Col.)

" *grape, injured* by *Eurygaster indica* (Col.)

" *grape, injured* by *Eurygaster indica* (Col.)

" *grape, injured* by *Eurygaster indica* (Col.)

" *grape, injured* by *Eurygaster indica* (Col.)

" *grape, injured* by *Eurygaster indica* (Col.)

" *grape, injured* by *Eurygaster indica* (Col.)

" *grape, injured* by *Eurygaster indica* (Col.)

" *grape, injured* by *Eurygaster indica* (Col.)

" *grape, injured* by *Eurygaster indica* (Col.)

" *grape, injured* by *Eurygaster indica* (Col.)

" *grape, injured* by *Eurygaster indica* (Col.)

" *grape, injured* by *Eurygaster indica* (Col.)

" *grape, injured* by *Eurygaster indica* (Col.)

" *grape, injured* by *Eurygaster indica* (Col.)

" *grape, injured* by *Eurygaster indica* (Col.)

" *grape, injured* by *Eurygaster indica* (Col.)

" *grape, injured* by *Eurygaster indica* (Col.)

" *grape, injured* by *Eurygaster indica* (Col.)

" *grape, injured* by *Eurygaster indica* (Col.)

" *grape, injured* by *Eurygaster indica* (Col.)

" *grape, injured* by *Eurygaster indica* (Col.)

" *grape, injured* by *Eurygaster indica* (Col.)

" *grape, injured* by *Eurygaster indica* (Col.)

" *grape, injured* by *Eurygaster indica* (Col.)

- Peas*. {twigs & small branches injured by *Bylla pyri*. (Hom.)
 " {buds &c. injured by *Rhopalos lateralis*. (Ht.)
 " {bark & wood injured by *Scolytus pyri*. (Col.)
 " {fol. inj^d by *Scandania ceres*. (Hym.)
 " {fol. inj^d by *Scirica imbricator*. (Col.)
 " {young fruit injured by *Sciara pyri*. (Dk.)
 " {fol. inj^d by *Leptodermus pyri*. (a mite.)
 " {fruit, when ripe, inj^d by *vespa*. (Hym.) & *Kornel*.
Persica vulgaris. Peach.
Persea mollis. or date plum. *Diospyros virginiana*.
 " {fol. injured by *Hyphomys*. (Lef.)
 " {leaves gnawed by *incisura* *complicata*. (Col.)
Peltis. injured by *Pinus* Lin. *Dermis*.
 " {leaves &c. (Col.)
Phlox. injured by *Heliothis phloxiphaga*. (Lef.)
Phaseolus. (Fabas) Beans
Pigeons. visited by Red Bugs *Acanthia luctulosa*. (Ht.)
Pine. *Pinus*. wood. inj^d by *Alaus oculatus*. & *myops* &c. (Col.)
Pine. white (& gray). frequented by *Aphrodis*. (a 4 notata. (Spittle insect). (Hom.) & *A. parallela*. (Hom.)
Pine. {fol. injured by *L. arumale*. (Lucicola. Col. & *A. pinicola*. (Col.)
Pine. {wood & bark inj^d by *Aulonium parallelopipedum*. (Col.)
 " {leaves &c. inj^d by *Aspidiotis*. *pinifolia*. (Hom.)
 " {leaves &c. injured by a white scale. *ul. pubescens*. (Hom.)
 " {fol. injured by *Lophyrus*. *abietis*. (Hym.)
 " {wood & fol. injured by *Buprestis*. *lineata*. (Col.)
 " {wood. inj^d by *Chalcidiora* *whitelyi*. (C. virginianensis). (Col.)
 " {wood injured by *Chrysobothris harrisii*. (Col.)
 " {wood injured by *Corticus* *hypophloeus*. *parallelus*. (Col.)
 " {frequented by *Dephax tricarmata*. (Hom.)
Pine. Wood & bark &c. injured by *Dendroctonus*. *hydropicus*. (Col.)
 " {Pick. wood inj^d by *Dicaea punctulata*. (Col.)
 " {White. fol. inj^d by *Lichomyza albescens*. (Col.)
Pine. {fol. inj^d by *L. cecalis*. *imbricator*. (Lef.)
 " {Pick. wood inj^d by *Exochus pates*. (Col.)
Pine. wood. {*Abies balsamea*.
 " {White. frequented by *Leckmus*. *strobis*. (Hom.)
Pine. wood inj^d by *Lophyrus abietis*. (Hym.)
 " {Austrian & Scotch. injured by *Lophyrus lecontei*. (Hym.)
 " {white. fol. inj^d by *Lophyrus Abbottii*. (Hym.)
 " {wood inj^d by *Melanophila* *marginata*.
Pine. wood inj^d by *Monadenus titillator*. (Col.)
 " {white. sapling shoot &c. injured by *Pissodes strobis*. (Col.)
Pine. wood. inj^d by *Promus cydoniae*.
 " {*Orthocoma*. *truncatus*. (Col.)
 " {under bark. frequented by *Ptycho*. *depressus*. (Col.)
 " {in nests of *Rhagothrips*. *Stenocorus lineatus*. (Lef.)
 " {bark & wood injured by *Tomicus*. *pinis*. (Col.)
 " {wood inj^d by *Xylotrechus saggi* *tatus*. (Col.)
Plantain. *Plantago*.
 " {fol. eaten by *Pyrantia calata*.
 " {ant. most of the *Acronis*.
Plum. *Prunus domestica*.
 " {bark & wood. &c. &c. injured by *Agonura scitosa*. (Lef.)
 " {fol. inj^d by *Anisoplyx*. *uninata*. (Lef.)
 " {round holes eaten in fruit by *Anthonomus quercusphobus*. (Col.)
 " {holes eaten to kernel &c. *Anthrenus*. *scutellarius*. *pinivora*. (Col.)
 " {bark inj^d by *Aspidiotis*. *conchiformis*. (Hom.)
 " {fol. destroyed by *L. Clisocampa*. *americana*. (Lef.)
 " {fruit destroyed by *Conotrachelus*. *remus*. or *plum*. *verus*. (Col.)
 " {wood inj^d by *L. of* *Stenocorus*. *devani*. (Col.)
 " {fol. inj^d by *Ectis*. *imbricator*. (Lef.)
 " {fol. inj^d by *Grapholera chaigica*. (Col.)
 " {Hom. (Col.)

Plum. not injured by *Myiophoma* leaf-roller.

" *Twigs* buds, inj. by *Ithyaenus curvica*.
(*Conocleas*. (Col.)

" {fol & blossom. *L. Macrodactylus* lvs. sub-
" spinosus. (Col.)

" {fol inj. by *Macronoxia* (*Polyphylea*)
" varietalis. (Col.)

" {branches punctured by *Acanthos*
" rous. V. (Col.)

" {injured by *Phyllobius* or *varieg.*
" (Col.) *Eucetis*

" {fol inj. by *Physiphora*, *Lucas*, &c.
" (Col.) & other May beetles

" {fol inj. by *Platysamia*, *acropia* (Col.)
" {frequented by *Amorus*, *Pachylotera*

" {ruinosa. (Holt.)

" {inj. by *Rhynchos* cyprinus (Col.) &c.
" {injured by *Semaria* prunivora. (Lep.)

" *Plum* (buds), a fungoid growth sec. *Sphaeria*
" *rubra* & frequented by various insects.

" *Podophyllum peltatum*. Most appls. manibrake
" {frequented by *Amorus*, *Pachylotera*

" {septentrionalis. (Holt.)

" *Pollen & petals* of flowers injured by Slugs.
" *W. earwigs* (*Forficula*).

" *Polygonum*. Knot weed.
" {injured by *Coccus polonicus* (Holt.)

" *Poplar*, or *Aspens*. *Populus alba* &c.
" {fol injured by *Cantharis* variegata. (Lep.)

" {fol injured by *Colaspis*, *Arctia*
" (*Amorosa*. (Col.)

" {fol destroyed by *Enomus*, *subg*
" (*nomia* (Lep.)

" {fol injured by *Ichthyura* inclusa
" (*Platba* americana *Parlor* summer Lep.)

" {damaged most frequented by
" (*Enomus* lobatus & (Col.)

" {fol inj. by *Lophochora* variis.
" (*Salticoma* (Col.)

" *Poppy*. (*Papaver*.)
" {heads frequented by *Cantorychnus*. (macula) (Col.) *Eucetis*

" *Potatoes*. *Solanum tuberosum*.
" {roots inj. by *L. altissima* (Linn.)

" {leaves. (Col.)

" {leaves bored by *Bombus*, *Bombus*
" (*lucorum* (Lep.)

" {fol inj. by *Phaenocarpa*, *Phaenocarpa*
" (*lucorum* (Holt.)

" {fol injured by *Chrysomela*, *Lophophora*
" (*lucorum* (Holt.)

" *Potatoes* fol. injured by *L. Chrysomela*.

" *Dryophora juncta*. *False potatoes* (Lep.)

" {fol frequented by *Enallia* carinata (Holt.)

" {fol inj. by *Epicausta* cinerea.
" & *Corvinia*, & *Amorosa*, & *forma*

" {*subarctica*, & *viridula*. & *Cantharis*
" (*Lutia* (Col.) *Potato* beetles

" {*Stactes* bored into by *Gorytina*
" (*nitida*. " *Shenille* worm" (Lep.)

" {inj. by *Tryblotus* borealis (Orth.)

" {fol inj. by *Some*, *trivialis* (Col.)

" { " *Lugus*, *lineolaris*, (Holt.)

" { " *Macronoxia*, *carolina*.
" & *M. quinque maculata* (Potato

" {worm) (Lep.)

" {fol inj. by *Mysus* raphanus. (Holt.)

" {leaf disease said to be caused by
" (*Scirpus*, *fucatus*, & *S. quinque maculata*, &c.

" {said to be injured by *Phaenocarpa*
" (*nitida*. (Lep.)

" {pulp of fol. eaten by *Edura*
" (*nitida*. (Col.)

" {fol & " injured by *L. Pontia* & *varia*
" & other white butterflies. (Lep.)

" {Trickly ash. *Xanthoxylon*, *carolinianum*.
" {fol eaten by *L. Parula*, *raphanus*.

" {*Tringa*, (Col.)

" {leaf & fruit eaten by *Stenocera*
" (*cantharis* (Col.)

" {Trickly pear or *Trickly*
" (*Trickly* (Lep.)

" {*Trickly* (Lep.)

" {*Trickly* (Lep.)

" {*Trickly* (Lep.)

" {*Trickly* (Lep.)

" {*Trickly* (Lep.)

" {*Trickly* (Lep.)

" {*Trickly* (Lep.)

Quins. (birds) destroy cherub bugs.
 {Pleiss. leucobasis Macdonald in

Quince. Cydonia vulgaris.
 " injured by Conotrachelus nem.
 {larv. & many of the insects inju-
 ring the apple. (Col.)
 " {fol. & fruit injured by Lepus.
 {larv. (Holt.)
 " {fol. & fruit injured by Trioxys
arcuatus. (Holt.)

Radish. Raphanus.
 {Root (by d. Europe) by Ameloma
rathus. V. A. radicum. (Lep.)
 " {in. by Maryanthe stracheyi
nitidulata. (Holt.)
 " {fol. inj. by Myzus raphanus. (Holt.)

Ragweed. Ambrosia.
 {injured by Aptrophora? (Holt.)

Raspberry. Rubus idaeus.
 " {fruit inj. by Comptosia ulmi
 {larv. (Holt.)

" {Rht in stem eaten by Agrius.
ruficollis. (Col.)

" {leaves frequented by Byturus.
tomentosus. (Europe, Col.)

" {leaves inj. by Agrius. (Holt.)
 {Europe (Holt.)

" {fol. inj. by Lepus lineatus & Horn.
 " {stem could eat by Oberca tria.
donistata. (Col.)

" {branches punctured by Psylla.
noivus. (Col.)

Rattle box. Crotalaria.
 " {leaves in pods, form food of Uthetia
sa. (Paorea) bella. (Lep.)

Red lead {water color paint, even eaten
 by Octobius germanica. (Col.)
 {rocks. (Orth.)

Red pepper. Capiscum.
 " {fol. eaten by Lepus. (Holt.)
 {larv. (Lep.)

Reeds. stems form hybernating quarters
 of Cyphon pallidus. (Col.)

Riesda Mignone.
 " {leaves frequented by Byturus
laevis. (Col.)

* Rhus glabra. smooth Sumach, V.
 * Rhus glabra. smooth Sumach, V.

Roots frequented by Byturus
laevis. (Col.)

Ribes. ribesia. Currant.
 " {leaves frequented by Byturus
laevis. (Col.)

Rhubarb. Rheum.
 " {leaves frequented by Byturus
laevis. (Col.)

Rhubarb. {fol. frequented by Byturus. (Col.)
 {leaves frequented by Byturus. (Col.)
 {leaves frequented by Byturus. (Col.)

Rice. Oryza sativa.
 " {grain inj. by Culex. (Col.)
 {leaves inj. by Byturus. (Col.)

" {leaves inj. by Byturus. (Col.)
 " {leaves inj. by Byturus. (Col.)

Ricinus. caninus. Castor oil plant.
 " {leaves frequented by Byturus. (Col.)

Rose. Rosa.
 " {leaves frequented by Byturus. (Col.)
 {leaves frequented by Byturus. (Col.)

" {leaves frequented by Byturus. (Col.)
 " {leaves frequented by Byturus. (Col.)

" {leaves frequented by Byturus. (Col.)
 " {leaves frequented by Byturus. (Col.)

" {leaves frequented by Byturus. (Col.)
 " {leaves frequented by Byturus. (Col.)

" {leaves frequented by Byturus. (Col.)
 " {leaves frequented by Byturus. (Col.)

" {leaves frequented by Byturus. (Col.)
 " {leaves frequented by Byturus. (Col.)

" {leaves frequented by Byturus. (Col.)
 " {leaves frequented by Byturus. (Col.)

" {leaves frequented by Byturus. (Col.)
 " {leaves frequented by Byturus. (Col.)

" {leaves frequented by Byturus. (Col.)
 " {leaves frequented by Byturus. (Col.)

" {leaves frequented by Byturus. (Col.)
 " {leaves frequented by Byturus. (Col.)

" {leaves frequented by Byturus. (Col.)
 " {leaves frequented by Byturus. (Col.)

" {leaves frequented by Byturus. (Col.)
 " {leaves frequented by Byturus. (Col.)

" {leaves frequented by Byturus. (Col.)
 " {leaves frequented by Byturus. (Col.)

" {leaves frequented by Byturus. (Col.)
 " {leaves frequented by Byturus. (Col.)

" {leaves frequented by Byturus. (Col.)
 " {leaves frequented by Byturus. (Col.)

" {leaves frequented by Byturus. (Col.)
 " {leaves frequented by Byturus. (Col.)

" {leaves frequented by Byturus. (Col.)
 " {leaves frequented by Byturus. (Col.)

" {leaves frequented by Byturus. (Col.)
 " {leaves frequented by Byturus. (Col.)

" {leaves frequented by Byturus. (Col.)
 " {leaves frequented by Byturus. (Col.)

" {leaves frequented by Byturus. (Col.)
 " {leaves frequented by Byturus. (Col.)

" {leaves frequented by Byturus. (Col.)
 " {leaves frequented by Byturus. (Col.)

" {leaves frequented by Byturus. (Col.)
 " {leaves frequented by Byturus. (Col.)

Shad bush or Service berry. Wood. inj?
 {by *Sabotea canadensis* *lenticularis*
 Sheep - injured by *Sial.* see *Canes*.
 {injured by head maggot, see
Anthomyia oval. (Lep.)
 " {annoyed by *Sheep tick*, *Couse*
 or fly. *Melophagus ovinus* (Dy.)
 Sheep lice. inj? by *Sitona* *panicea*.
 {Col.
 Shrimps, tongs, & buds, eaten by *Phasmodon*.
 (Orth.) *Diaphoromera* &c.
 Sial hemp. fed upon by *insects*. see
 {the *insects*.
 Sinapis mustard.
 * Sick weed. *Asclepias*.
 Skin, dried, injured by *Anthrenus* *varius*
 {*Dermestes* *industrialis*, &c. *Pharus*
 {see p. 2. &c. (Col.)
 Skin of living birds &c. infested by
 {*Mallophaga*. or living birds. is.
 {acanth. &c.
 Snakes, when dead eaten by *Syneca* *canis*
 {*canis*, &c. (Col.)
 Snails. form food of *Lampyridae* (Col.)
 " " " *Silphidae* &c. (Col.)
 Snow in Europe, sometimes frequented by
 {*Heteronididae*. (Lep.) *Phonocera* (Lep.)
 {&c.
 Sod grown, injured by *Gryllotalpa* *bonedea*.
 {Orth. L. & cut worms *Agrotis*
 {&c. (Lep.)
 Solanum elaeagnifolium. Bitter Sweet.
 " *esculentum*. Egg plant.
 " *luteum*. Potato.
 " *canadense*. Horse nettle.
 " *canadense*. fed upon by *Chrysomelae*
 {a. (*Poryphora*) *puncta* & 10.
 {*lineata*. (Col.)
 Sorghum. fed & injured by *Pharus* *tricolor*
 {*laevigatus*. *Chenopod* (Lep.) & many
 {other insects injuring *maize* &c. (Hes.)
 Sorghum. Sugar mill.
 * Sorbus. *Pyrus* *americanus*. Mountain ash.
 Spear mint. fed, eaten by *Sphinx* *erom*.
 {Lep. (Lep.)
 Spruce, or fir, *Abies*.
 " wood, inj? by *Angiotheca*
 {*abietis*. *abietis* (Col.)
 " {feeding shoot &c. inj? by *Pissodes*.
 {*strobil*.
 " fed upon by *Thyridophorus* *edem*.
 {*erom* *bonis* - Hang or basket worm. (Lep.)

Squash. *Cucurbitaria*. *aculeata*.
 " {*fruit* & *inj.* by *Anasa* *gonion*
 {*bonis* (Smith) (Lep.) (Lep.)
 " {young plants. inj? by
 {*Diabrotica* *vitata*. (Col.)
 " {*fruit*, inj? by *L. Epilachna*
 {*bonalis*. (Col.)
 " {*fruit*, inj? by *L. Thabellaria* *retia*
 {*calis* (Lep.)
 Strawberry. *Fragaria*.
 " {plants frequented by *Chrysomelae* (Hes.)
 " {*bonis* inj? by *Anthrenus* *luteus*
 {*luteus*, *stygicus* (Col.) &c.
 " {inj? by *Anthrenus* *incarnis*.
 {*Europe* (Col.)
 " {*fruit*, inj? by *Conomelasma*, *stria*
 {&c. (Hes.)
 " {*fruit* inj? by *Emphytes* *mauritanica*.
 {*Hym.* Strawberry worm. or saw
 {fly.
 " {*fruit*, inj? by *Lygus* *concoloratus*.
 {Hes.)
 Starwort. *Aster*.
 " Stuffed animals. *Acridae*, &c. injured by
 {*Pharus* *fur*, *Dermestes*, *anthrenus*
 {&c. (Col.)
 Sugar cane. *Saccharum* *officinorum*
 " {inj? by *Gryllotalpa* *didactyla*
 {*Orth.* (in West India &c.)
 " {frequented by *Naucis* *dentatus*
 {Col.
 " fed upon by *Pyrophorus* *rochus*
 {*col* (Col.) (Cane. in West India &c.)
 " {*Silvanus* *dentatus*, *Col.*
 Sumach smooth. *Rhus* *glabra*.
 " {frequented by *Lilypus* *caninus* (Hes.)
 Sumach. fed, inj? by *Chromalis* *var* *ind.* &c.
 {Col.)
 " {frequented by *Pylae* *stria* (Hes.)
 Sugar millet. Sorghum.
 " {*stria*, infested with bed bugs. *Acra*
 {*stria* *luteolus*. Hes.)
 Sweet brier. *Rosa* *rubiginosa*
 " {*fruit*, inj? by *Sinea* *vasperina* &c. Col.
 Syringa vulgaris. Lilac.
 Tamarack. *Macromatach*. Am. Larch.
 {*Larix* *americanus*.
 " {*fruit* inj? by *Tolyte* *lancea*. Larch
 {cheater (Lep.)
 Taxaceae. *taxus*, *Pinus*. *Pinulation*.
 Thistle. *Cirsium* *lanceolatum*.
 " {frequented by *Euclyptus* *lanceolatum*
 {*punctifera* (Hes.)
 Thistle. *Cirsium* *lanceolatum*.
 " {frequented by *Euclyptus* *lanceolatum*
 {*punctifera* (Hes.)

Thorn. *Crataegus*.Wood. inj^d by *Saperda candida*.
lividula (Col.).Thyia occidentalis. Amer. Cedar. vire. white
cedar.

Syr. Sunders. Basswood.

Lumber. (Naval Ship) wood. inj^d by
Gymexylon navelle. (Cal) EuTobacco. *Nicotiana tabacum*.

" fol. inj^d by *Macrosila* (Spha)
Carolina & *Mcquingymaculata*
Tobacco worm. Horn. flower. (Sph)
" inj^d by *Acantia nivalis*. (Orth)
" when " and " destroyed by
Silodupha ronticea. (Col)

Carnals. *Scaphium* *esculentum*.

" fol. injured by *Anurobes*. (Hom)
" fol. inj^d by *Chrysomela* *Lophophora*
" *W. lineata* (Col)

" Stems. bored into by *Agryne*
nitida. (Brants worm. (Sph)
" fruit inj^d by *Kelidonia* *armige*
" (or) *bell* worm. (Sph)

" fruit. fol. inj^d by *Macrosila* (Spha)
Carolina & *Mcquingymaculata* V.
(Sph)

" fruit & inj^d by *Prodonia* -
" *commercia*. (Sph) & *Prodonia*
" *aut. nivalis* (Sph)

Tree. Saps. sucked by *Prochyra* *arboris*.

" (Horn) 4th 6th see apple Oak 4th
" (Sph) flower. catch^d by *Phasmidea*.
" *Diapheromera femorata* V. (Orth)

" leaves. blighted by *Phytomyza*. (Sph)
" & injured by insects see under
" Oak, apple. 4th & 6th

Infolum. see Clover.

Triticum. Wheat.

Triticum. *hastatum*.

- Walnut. *Juglans*.
 " { fruit inf. by *Conotrachelus nemus*.
 " { thorn.
 " { wood inf. by *L. Dysphago. tenuipes*.
 " { (Col).
 " { twigs cut off (from inside) by *Elas-*
 " { pidiion. *patulus*. *Stenocorus*. (Col).
 " { wood inf. by *Heteromeres*. be=
 " { maculatus. (Col).
 " { inf. by *Lactonus curvica*. (Hom).
 " { Twig girdled (from outside) by
 " { *Oncideres angulatus*. (Col).
 " { frequented by *Oticorus amygdali*.
 " { (Hom). & *Smithia van*. (Hom).
 Warts. { growth parasite insect in body.
 " { *Stylaps*. (Col) *Flas* of *Meloc*. (Col).
 Wax. { destroyed by *Galleria cerasana*.
 " { (Lep).
 " { formed by *Fista limbata* in
 " { China. (Hom).
 Wheat. *Triticum vulgare*
 " { grain, sucked inf. by *L. of*
 " { *Agramyza tritici*. (Lep).
 " { fol & inf. by *Anabrus* -
 " { *Simplex* (Orth).
 " { grain inf. by *Anacomphes*.
 " { *cerealella*. (Lep).
 " { fol & grain inf. by *Artis avenae*.
 " { or Oat plant. (Hom).
 " { fol & grain inf. by *Blacus* (Microgus).
 " { *lucorum*. (Hes).
 " { Strals & stem inf. by *Proscus alb*
 " { *abalis*. (Cu) (Col).
 " { grain injured by *Calandra Sitophi*
 " { = *lus*. *granovus remotipunctatus*.
 " { & *C. oxyrac*. (Col).
 " { when young inf. by *Calathus latus*
 " { (Col). *Europe*.
 " { stalk & inf. by *Cephus pygmaeus*
 " { (Col). *Europe*.
 " { Swelling of stalk, or joint, caused by
 " { *Chlorops tenuipes* (Lep).
 " { Grain inf. by *Lilius*. *Ceatomyia*
 " { *tritici*. (Lep). *Wheat* mites.
 " { Stem & plant inf. by *Ceatomyia*
 " { *tritici*. or *Wheat* fly. *Lep*.
 " { grain inf. by *Selechia cerealella*
 " { (Lep).
 " { injured by a swelling in the stem
 " { called "Galls".
 " { grain said to be inf. by a beetle
 " { *Cantharus caliginosus*. *Pangas*. Col.

- Wheat swelling of joint, caused by *Isosoma*
 (*Eumetoma*) *hordei*. (Hym).
 " { plants inf. by *L. Lophomyza macra*.
 " { (Lep).
 " { inf. by *Elabus typhaeus*. (Hes).
 " { young grain inf. by *Oscinis* (Lep).
 " { fol. grain & injured by *S. Prodenia*
 " { *autumnalis*. (Lep).
 " { seed inf. by *Siloanus summatensis*.
 " { (Lep).
 " { grain inf. by *Silo duchs panacea*. (Col).
 " { *Tenelminites*. *Trogasita*
 " { *mauritanica*. (Col). *Silo* *Tenelmonia*
 " { said to be inf. by *Thrips*. *limo*.
 " { *Thrips cerasi*. (Orth).
 Whortleberry. *Huckleberry*. *Gaylussacia*.
 " { frequented by *Terceus imicolor*. (Col).
 White cedar. *Arbor vitae*. *Thuja occidentalis*.
 Willow. *Salix*.
 " { twigs inf. by *Cerosa lubatas*. Hom.
 " { fol inf. by *Calappa lanigera*.
 " { *areoda*. (Col).
 " { Wood inf. by *L. of Dynastes*.
 " { *tityus*. (Col).
 " { fol. inf. by *Schizura inclusa*.
 " { *Clatona americana*. (Lep).
 " { Wood inf. by *Lacuna dema*. (Col).
 " { fol. inf. by *Pieris rapae*. (Lep).
 " { " *Hypocrepia varia*.
 " { *Saturnia*. 10. (Lep).
 " { fol. inf. by *Tingis juglandis*. (Hes).
 Wigelia. *For* inf. by *Lygus lineatus*. (Hes).
 Wood. said to be eaten. by *L. Cistellidae*. (Col).
 " { eaten by *Orthopleura danicornis*.
 " { (Col).
 " { rotten frequented by *Pezomachus*.
 " { (Col).
 " { when decaying frequented by
 " { *Tormes flavus*. (Hes).
 " { injured or bored by *Procerata*
 " { (Hom).
 Yellow in peach not caused by insect.
 " { but said to be a longish growth.
 Zanthoxylum. *fruticosa* arb. (see *Sphaeria*)
 Zea mays. *Indian corn*. *Maise*.
 Zinc sheet zinc hole eaten through by *L*
 " { *Hypocrepia*. *capitata*. (Col).
 Zingiber officinale. *Zingiber*.



Uddendele. & Errata.

In a manuscript work like the present, it is almost impossible for a poor reader to correct errors, after the page has once passed the hands of the Lithographer's press, as in order to alter a single word or paragraph the whole page would have to be rewritten. The following formal errors, which doubtless will hereafter be discovered, will be given in another edition & should the work be deemed worthy of being printed in type.

- Page 1, line 3. alter to 1876.
 " 1. " 24. Alter to LXXVIII/24 instead of LXX/24
 { in Altraxas
 " 4. " 16. alter to 11/14 instead of 11/14
 " " 30. Insert. (Anisomorphus huprestoides)
 { Spectrum leucitatum (Orth.) feed
 { on Jurga, rounds SS. 1/5) after
 { Amimus
 Page 9, line 27. Insert Altacus Banhouca.
 { see Bombyx, Faithorbia.
 { SS. XI/11 (Sep.) after Altrachus.
 * Page 10, line 17. Insert. Palato honer. SS. XII/32
 { after Bandus.
 Page 14, line 46. Alter word Macetes to Mugacoles
 " 16. " 6. Insert the word Epicaula, between
 { Cantharus & Corvus.
 Page 16, line 23. Alter Weigelia & Dietzia to
 { Weigelia, & Dietzia. (& wherever
 { these two words occur in the text.
 Page 17, line 18. Insert the word "Grain" after
 { wheat.
 Page 18, line 1. Alter Regol Walnut moth to
 { Elm, Sphinx.
 Page 20, line 19. Omit, 1865 p. 456.
 " 23. " 23. Alter, VIII/8 after SS. 6 XIII/14 Orth.
 " 24. " 15. Insert Coryneles neobria viola.
 { see Ins feeds on Corion SS. XII/32
 { (Col.) after Coryneles aufipes.
 Page 27, line 19. Insert "Delana minstra. L. f. 80
 { on fol. of Apple & SS. XI/7 LXXIII/12
 { (Col.) before "Day fly".
 Page 27, line 33. Insert "Nephesaria Ontarville -
 { hachiana (Bp.) L. feeds on Galer
 { Pontax & SS. XVI/11 (Sep.)
 " 27, line 51. Insert "Deutera fol injured by
 { Lagus lineatus SS. 1/5 (Hom)
 { after Deutera darning needle.
 * 27, line 51. Insert "Diabrotica Galeruca
 { duodecupunctata. Ag. Rh. 1853.
 { p. 60. 1855 p. 90 p. VIII fig. 1. eat
 { holes in vegetables. Linnaeus & Edmon
 { 1870 (Col.) after Deutera darning needle.
 Page 29, line 44. alter Sityrus to Sityrus
 " 29, line 50. Bottom of page insert Syphax &
 { Tesara temipes SS. XIV/10 (Col.)
 { after Syphax.
 Page 31, line 2. Insert "Elm See Sphinx see Arats
 { mia quadricornis, amyator. L. f. 80
 { on fol. of London, Elm, & SS. VIII/1
 { XII/1 (Sep.)" after Elm.
 Page 32, line 13. Insert "Epitris cicumenis. see also
 { Chalcid dera pubescens SS. XXIV/2 (Col.)
 { after Epitris.
 Page 33, line 29. Insert "of cucumber &" & long young
 { plants.
 Page 36, line 12. Alter XLI 43 to XLI/33 end of
 { Galeruca
 Page 36, line 33. Insert "house" between cor & fly.
 " 36. " 36. alter XXIV/9 to XXV/9 after Galeruca
 " 40. " 23. Insert "Cypencyria varia, see
 { Saturnia SS. VI/5 XVIII/12 (Sep.)
 { after Cypencyria varia.
 Page 46, line 2. alter Weigelia to Weigelia.
 " " 33. insert "Macronoxia melanica
 { or Polyphyla, varicosa SS. XXV/20
 { (Col.) after Macronoxia melanica.
 Page 50 line 1. alter protescent to protescent.
 " 51 " 2. Insert "Nephopterix undulata
 { see Phycia rebus. SS. XIV/1 LXX/2
 { (Sep.)" after met.
 " " 2. Insert "Nemophila plumipes. silk
 { producing Spider. by Mr Weller
 { cor, Ins vol 6 after Nem
 { apiculata.
 Page 53, line 25. Insert "Ormenis pinus. &
 { after Ormenis pinus. SS. 1/6. (Hom)
 { after Ormenis pinus.
 Page 53 line 47. Insert "Orthosoma brunnea see
 { Prionus cylindricus SS. XVI/2 (Col.)
 { after Orthosoma brunnea.
 Page 55 line 33. Insert "Pellis surinamensis, see
 { Necrops, SS. IV/3 (Col.) after Pellis
 { gus pyri. SS. 1/6, Nov 1, 1877.

Addenda & Errata.

Page 56, line 40. Insert *Lechnosterna*, as a Syn.
 { at the end after Col. *mate guercina*
 { line 38 as merely a Synonym.

Page 57, line 12 Read, *Meigelia* instead of *Wigelia*

" 57, " 25. Alter *Macronema*. *SG* XIII/15 to
 { *Macronema*, *SG* XXII/2 (Col.) "

Page 62, line 18 alter *Bete* near, to *Bete rouge*.

" 68, " 21. Insert "*Smerinthus exaccatus*,
 { see *Sphinx* *exaccatus* *SG* II/4. XXII/4
 { (*Lep.*) before *Emilia auriculata*.

Page 71, line 35. Insert "*Selea* see *Attacus*,
 { *polyphemus*, *SG* VII/5. II/14 (*Lep.*)
 { after *Telemona*.

" 71, line 36 Bottom of page Insert "*Tenebrionides*
 { *dubia*, see *Tragosila*, *Syn.* *SG* IV/25 (Col.)

" " " Bottom of page Insert *Tenebrionides*
 { *mauritanica*, see *Tragosila caraboi*.
 { *des.* *SG* XXXI/3 (Col.)

Page 74 line 65. make *Tenebrionellus*, a synonym
 { *Tragosila caraboi*

Page 74, line 74 Alter *Tenebrionellus* to *Tenebrionides*

" 76, line 41. Insert "*leucoc*" " injured by
 { *Lygus leucoc*, " after *see* *weave*.

page 77, line 33. Insert *Euphrasium fasciatum* see
 { *Orchelimum praele* *SG* (V/1) (*Orth*)

page 82, line 35. Insert. *Chrysocnus auratus* *SG* XXIV/10
 { (Col., after Col.)

page 84, line 49. alter *Commelinia*, to *Commelyna*.

" 85, " 4. alter *Panara* to *panicea*.

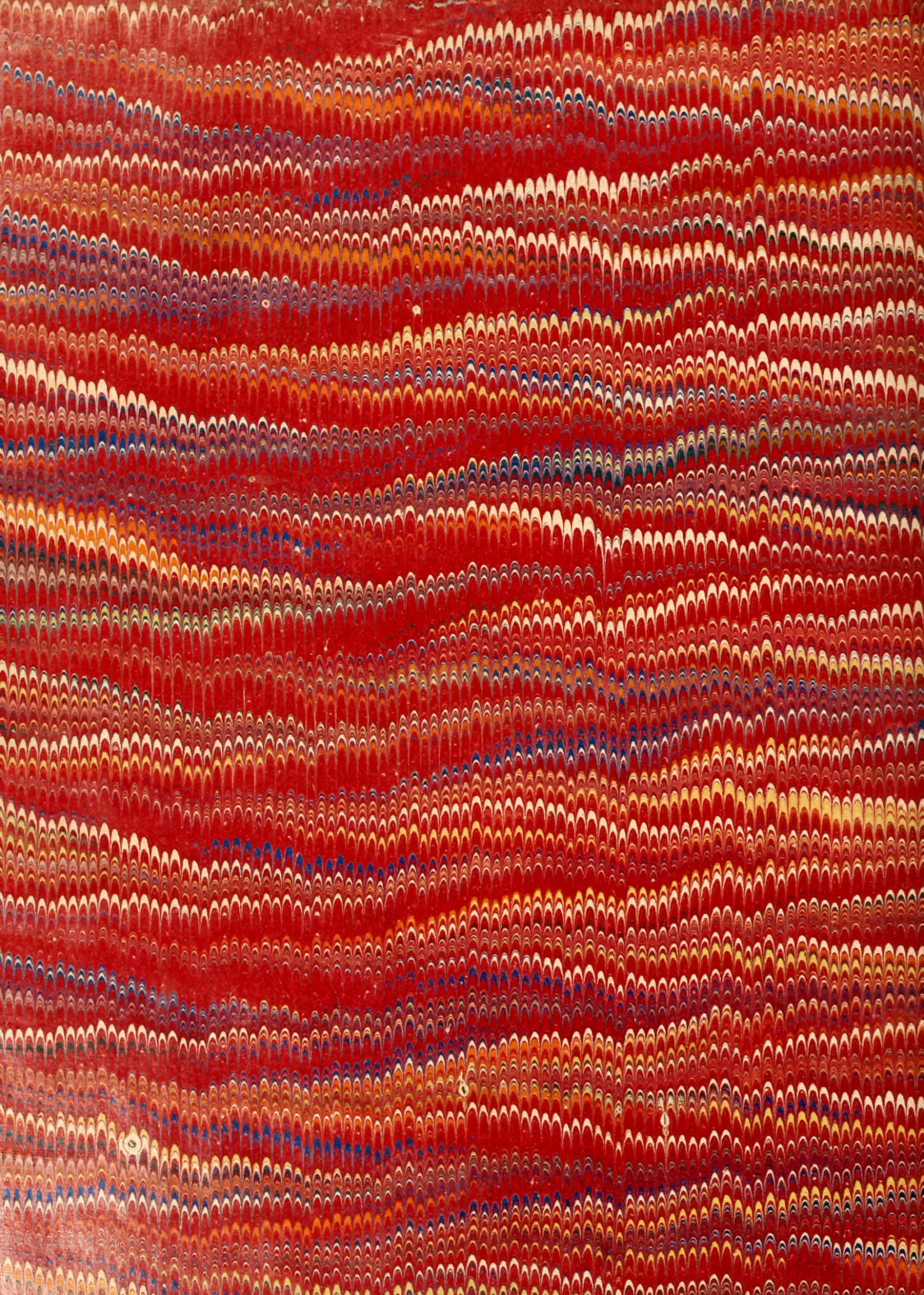
" 89, " 22. (Col. injured, by *Enomata lucicola*
 { *U. rufum* 9 (Col.)

page 94, line 28 Alter *Sumnamensis*, to *Sumnamensis*

" 96, line 42. make *Scatellatus* the right name
 { *U. rufum* *des.* the synonym

SG *Blower* Nov 2 1877

Blank for Notes.



and.
in app. reports

SMITHSONIAN INSTITUTION LIBRARIES



3 9088 00820 7177